RESIDENTIAL BURGLARY: FACTORS RELATED TO ITS PSYCHOLOGICAL IMPACT ON FEMALE VICTIMS.

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ABSTRACT

This thesis reviews the theoretical and research literature pertaining to the nature of burglary's impact on victims and why this differs between individuals. Primarily it aims to identify factors which are and are not related to severity of residential burglary's psychological impact on victims. To meet this aim, face-to-face interviews were conducted with 102 adult females, burgled 8-11 weeks prior to assessment. As well as an unstructured interview concerned with immediate reactions to the burglary, purpose-developed likert-type scales were administered to respondents, assessing burglary's psychological impact on victims in terms of immediate and long-term emotional reactions, cognitive intrusiveness, changes in security behaviour, loss of trust and perceptions of violation. Information was also collected from victims regarding various characteristics of themselves and their burglary. Upon analysis, event characteristics, and particularly disarrangement and sentimental and monetary value of losses emerged as the best predictors of victim reaction. Victim age, insurance status, level of social support and history of burglary also had some relationship to reported reaction intensity. Theoretical implications of these findings are discussed, drawing largely on theoretical work concerning the meaning of property. Limitations of the current research and directions for future research are also discussed. Lastly, practical implications of the findings for police and victim support are outlined.

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Chapter One

Between January 1 and June 30, 1992, Christchurch Police received 1937 reports of residential burglary within urban Christchurch. Given that a sizeable number of crimes go unreported, and that a single burglary can have several victims, it seems likely that burglary is an event affecting a rather high number of individuals in our community.

It is fairly common knowledge that as with any stressor, the impact of burglary varies between individuals. However in order to identify which victims are likely to experience burglary as a significant life event causing high-level distress, research is necessary. The aim of the present study is to investigate the relationships of a variety of victim and event characteristics to the psychological impact of burglary on female victims. Although some previous research has been conducted to investigate the relationship of certain variables to victim reaction, very little of this research deals specifically with burglary, and of that which has been conducted, much of it is poor in quality, and is limited to the U.S., Britain and Europe in origin.

It is a fact of life in today's world that police and other agencies offering victim support are overstretched in terms of workload. Not every incidence of crime can be attended to as it might have been in the past. Therefore, resources must be allocated in terms of priority. If factors predictive of impact severity could be identified, these could be capitalised on to increase the chances of *traumatised* victims receiving empathetic treatment from such agencies. Accordingly, findings of this research will have real-world as well as scientific applications.

1.1 THE IMPACT OF CRIME ON VICTIMS: AN INTRODUCTION.

Over the last two decades, attention towards the psychological and behavioural impact of crime on victims has arisen in a diverse range of disciplines, reflecting the wide-ranging consequences of victimisation, as well as the interdisciplinary nature of victimology in general. As with other areas of victimology, the majority of research on the impact of criminal victimisation has occurred in the United States, although a small amount of research has also been conducted in Canada, England and Europe. Investigation into the impact of crime on victims in Australia and New Zealand is negligible, with the current literature largely comprised of general discussion papers (Auckland District Law Society,1987; Community Mental Health Service,1987; Maxwell, 1992; Sumner, 1987; Taylor,1989; Victims Task Force,1989,1992).

The majority of research on victimisation impact has focussed on rape (eg. Burgess & Holmstrom,1974,1978,1979; Burt & Katz,1985,1987; Janoff-Bulman & Freize,1983; Sales, Baum & Shore, 1984,1987). This bias in focus occurred partly because of the common assumption that serious offences are *more likely* to result in serious victim impact, while more minor crimes such as burglary and theft are not. This assumption ignores the fact that the high frequency of property crime relative to serious crime may make the number of *seriously affected* victims comparable. However the bias is also due to the fact that the women's movement was an important instigator of the "rediscovery" of victims (Greenberg & Ruback,1984; Karmen,1990; Sumner,1987). Only since the late 1970s has attention been directed towards the psychological impact of "less serious' criminal victimisation, despite it being "common knowledge" that residential burglary can

have a substantial impact on some victims beyond the mere loss of property (Maguire,1980).

While U.S. research dominates the literature on the victim impact of rape, the literature on property crime impact is shared more widely. Although only one known study exists in the Australasian research literature, investigating burglary (Bennett,1991), contributions of varying quality have been made by researchers in Britain (Corbett & Maguire,1988; Maguire,1980,1981,1982,1984,1985), Canada (Bourque, Brumback, Krug & Richardson,1978; Waller,1989; Waller & Okihiro,1978), the U.S. (Bard & Sangrey, 1979; Brown,1985; Brown & Harris,1989; Clarke & Hope,1984; Cook et al.,1987; Fischer, 1984a, 1984b; Friedman, Bischoff, Davis & Person,1982; Reppetto,1974; Stenross,1984; Wirtz & Harrell,1987) and Europe (Korosec-Serfaty & Bolitt,1986; Van den Bogaard,1990; Van den Bogaard & Wiegman,1991). Several of the U.S. studies considered a combination of crimes (Bard and Sangrey, 1979; Cook et al.,1987; Friedman et al.,1982; Lurigio,1987; Rosenbaum, 1987; Wirtz and Harrell,1987). However the majority of this literature deals exclusively with residential burglary, a crime of rather high incidence and one that is relatively simple to define.

1.2 METHODOLOGICAL ISSUES IN PAST RESEARCH.

Most previous studies investigating the impact of burglary on victims have utilised survey research methods. However their precise methodologies vary widely. They include methodologies reliant on scale-derived quantitative data (eg. Brown & Harris,1989; Wirtz & Harrell,1987), employing qualitative data to illustrate scale-derived results (eg. Friedman et al.,1982; Van den Bogaard,1990), or

utilising phenomenological methodologies such as content analysis of structured (Bennett,1991; Maguire,1980) or non-directive, in-depth interviews/questionnaires (eg. Bard & Sangrey, 1979; Fischer,1984; Korosec-Serfaty & Bolitt, 1986), or auto-biographical research (Paap, 1981). Although all types of research can make useful contributions to our understanding of the impact of burglary and other crimes, a combined quantitative and qualitative approach is likely to be the most useful. In such research, qualitative data serves as a reference point for understanding the patterns and trends identified in quantitative data.

Maguire (1982) points out that problems can arise in qualitative research since victims tend to exaggerate reactions, using strong descriptors. However, much of the quantitative literature is also limited in ability to determine impact. This is due to a reliance on simple (ie. present/absent) emotion checklists (eg. Brown & Harris,1989; Corbett & Maguire,1987) and global measures of impact (eg. "How affected were you?"), used frequently in early research (eg. Reppetto,1974; Haward, 1981) and in large-scale, multi-purpose victim surveys such as the British Crime Surveys (eg. Corbett & Maguire,1988).

Degree of specific reactions is far better ascertained when standardised measures are utilised. However to date, there have been virtually no scales developed to measure the impact of non-sexual victimisation. Only six studies identified in the literature made any attempt to quantify the *extent* of emotions experienced post-victimisation (Cook et al.,1987; Lurigio,1987; Friedman et al.,1982; Resick,1987; Van den Bogaard, 1990; Wirtz & Harrell,1987). Of these studies, only three (Cook et al.,1987; Lurigio,1987; Van den Bogaard, 1990) used scales specifically designed

for this purpose, and these lacked normative data and were unpublished. Others used scales initially designed to assess sexual dysfunction (Friedman et al.,1982) or developed as general indicators of emotional state, unspecific to victimisation. Only Van den Bogaard focussed specifically on burglary, while others dealt with several crimes.

Sample sizes have varied widely between burglary studies. Research by Maguire (1980) and Van den Bogaard (1990) have involved the largest samples with 322 and 236 subjects respectively. Most other studies have involved between 30 and 50 respondents. Almost all researchers have collected data via personal or telephone interviews rather than mail surveys, which are notoriously lower in rate and validity of response (Dane,1990; Miller,1991). Although some of the researchers on burglary have surveyed victims within 2 to 10 weeks of the event (eg. Maguire,1980; Clarke & Hope,1984; Van den Bogaard,1990), others (Bennett,1991; Brown & Harris,1989; Korosec-Serfaty & Bolitt,1986) did not interview their respondents until many months after the event. This leaves their data open to biases associated with ability to recall information.

The proportion of victims reported as "severely affected" by a crime varies between studies. However according to Lurigio (1987) and Maguire (1991), variations can be attributed in part to differences in sampling and information-gathering methods. Obviously the kind of victim sample (eg. petty versus very serious crime) and the manner in which it was obtained (eg. clinical or victim support-derived sample versus random victim sample) can influence the severity

of reactions identified. As a consequence, the generalisability of research findings to the general victim population may be reduced.

The only known New Zealand-based study on burglary impact (Bennett,1991) employed purposive sampling to obtain subjects, a method prone to biases of representativeness (Dane,1990). Most studies on victim reactions to burglary have drawn on police records as the source of potential respondents (eg. Brown & Harris,1989; Cook et al.,1987; Friedman, 1982; Korosec-Serfaty & Bolitt,1986; Maguire,1980; Lurigio, 1987; Rosenbaum,1987; Van den Bogaard,1990). This ensures a large population from which to sample and allows some form of randomised selection of subjects. It also provides more accurate information on the date and severity of the crime than is achievable through reliance on victim recall (Selzer & McCormick, 1987). However the method is not without problems, given that a sizeable proportion of crimes go unreported (Block & Block, 1984; Young, 1988). Since systematic differences exist between victims who do and do not report crime (Biblarz, Barnowe & Biblarz,1984), respondents contacted via police records may not be representative of the victim population as a whole. For example, insured victims are more likely to report crime since this is a prerequisite to filing insurance claims.

Although all studies on the impact of burglary made some attempt to identify emotional reactions, some earlier ones (eg. Bourque et al.,1978; Clarke & Hope,1984; Haward,1981; Hough,1984; Waller & Okihiro,1978) failed to consider behavioural and/or cognitive responses. In doing so, they ignored the fact that

these are closely related and that impact is multifaceted, expressed in a wide range of cognitions, behaviours and emotions (Lurigio,1987).

Victimisation is invariably unpredictable, and consequently, measures of victim affect, behaviour or belief obtained prior to the crime are rarely available. This forces a reliance on post hoc and retrospective research which lacks within- or between-subject control and is subject to bias because of the fallibility of memory (Myers,1987). In turn, this leads to problems when researchers wish to isolate the specific impact of the stressor on subsequent adjustment.

Reid (1990) and Sales et al. (1984) suggest that ideally, prospective longitudinal and multi-method research should be conducted on large samples of the general population, with the effects of traumatic events studied as they arise. The enormity of such an exercise makes it infeasible for most researchers. However potential exists for its inclusion within birth cohort and certain other lifespan development research efforts. The literature on the impact of victimisation indicates that to date, most studies have only focussed on immediate and short term effects (eg. Maguire,1980; Bourque et al.,1978). However, an increasing number of longitudinal post hoc research is appearing (eg. Cook et al.,1987; Ellis, Atkeson & Calhoun,1981; Friedman et al.,1982: Resick,1987; Van den Bogaard, 1990; Wirtz & Harrell, 1987), along with at least one study of quasi-experimental design involving non-victim control groups (Lurigio, 1987).

1.3 THE IMPACT OF BURGLARY ON VICTIMS: FINDINGS FROM PAST RESEARCH.

When research concerned with the impact of various forms of victimisation are compared, striking similarities are identified among the psychological reactions identified across events (Bard & Sangrey,1979; Lurigio,1987; Wirtz and Harrell, 1987). This parallel between the reactions of victims of burglary and of other events has positive implications for research. Naturally, systematic investigation into victim reactions for specific crimes is necessary. However where existing literature is lacking, findings concerning reactions to *other forms* of victimisation can also be drawn on to gain insight into possible reactions (McFarlane,1985).

1.3.1 Psychological Impact.

All literature concerned with the impact of burglary on victims concludes that for a *considerable proportion* of victims, this is a significant event (Bard & Sangrey,1979; Bennett, 1991; Bourque et al.,1978; Clarke & Hope, 1984; Cook et al., 1987; Corbett & Maguire,1988; Fischer,1984a, 1984b; Friedman et al.,1982; Haward,1981; Hough, 1984; Korosec-Serfaty & Bolitt,1986; Lurigio,1987; Maguire,1980,1981,1982,1984, 1985; Reppetto, 1978; Resick,1987; Waller & Okihiro,1978). Of course, some victims suffer little or no upset, accepting it as "just one of those things". As with any stressor, psychological reactions to victimisation experiences such as burglary are highly variable (Wortman,1983), with individual reactions differing in degree, type, time of onset and duration (Cook et al.,1987; Friedman et al.,1982; Maguire,1980; Waller & Okihiro,1978; Wirtz & Harrell,1987). While research suggests that emotional and cognitive stress diminishes for most victims in the months following the event, some reactions are very resilient, often reocurring for

victims when they are reminded of the event in some way (Bard & Sangrey,1979; Friedman et al.,1982; Sales et al.,1984; Wirtz & Harrell, 1987).

Concerning the short-term effects of burglary (ie. effects occurring within the first 24 hours following burglary), a number of reactions have been identified in research as occurring for a significant proportion of victims. These include shock (Bennett,1991; Brown & Harris, 1989; Clarke & Hope, 1984; Fischer,1984a; Korosec-Serfaty & Bolitt,1986; Maguire, 1980), anger or annoyance (Bennett,1991; Bourque et al.,1978; Brown,1983; Brown & Harris,1989; Friedman et al.,1982; McCann, Sakheim & Abrahamson,1988; Maguire,1980; Waller & Okihiro,1978), a desire for revenge (Bard & Sangrey, 1979; Fischer,1984a; Karmen,1990; Waller, 1984), depression, sadness and perceived loss of equilibrium (Bard & Sangrey,1979; Friedman et al.,1982; Waller,1989), and guilt and self-recrimination (Bard & Sangrey,1979; Friedman et al.,1982; Korosec-Serfaty & Bolitt,1986; Waller,1989). Perceptions of violation (Bard & Sangrey, 1979; Fischer,1984a,1984b; Janoff-Bulman,1985; Korosec-Serfaty & Bolitt,1986; Maguire,1980), isolation (Bard & Sangrey,1979; Fischer,1984a), powerlessness (Fischer,1984a; Korosec-Serfaty & Bolitt,1986; Lurigio,1987; McCann et al., 1988), vulner-ability (Brown & Harris, 1989; McCann et al.,1988), and insecurity (Maguire, 1980) can also occur. Fear (Friedman et al.,1982; Lurigio,1987; Maguire,1980; Reppetto,1978; Waller & Okihiro, 1978) and related physiological anxiety reactions ranging from tearfulness and trembling to sleep disturbances, concentration difficulties, feelings of panic, nausea and even vomiting are reported in the literature, particularly for female victims (Bard & Sangrey,1979; Brown,1983; Brown & Harris, 1989; Bourque et al.,1978; Clarke & Hope,1984; Cook et al.,1987; Friedman et al.,1982;

Lurigio,1987; Maguire,1980; Waller & Okihiro,1978). All these reactions can impact on behaviour if severe enough. For example, fear is closely linked to avoidance behaviour.

Although feelings of shock, depression, sadness and loss of equilibrium are often experienced immediately or soon after discovery of the crime, these tend to be short-lived. None of the literature on the impact of burglary victimisation identified these reactions as existing to any significant level in the long-term (ie. more than four weeks since the event). In contrast, other psychological consequences of burglary are more pervasive, persisting to some degree for anything up to several years following victimisation. Such reactions include feelings of guilt and self-recrimination (Friedman et al.,1982), a tendency to think or talk about the event (Bard & Sangrey,1979; Fischer,1984; Friedman et al.,1982), loss of trust and increased suspicion of strangers (Bard & Sangrey,1979; Brown & Harris,1989; Fischer,1984; Friedman et al.,1982; Waller & Okihiro, 1978), and for a few victims, disillusionment with society (Bard & Sangrey,1979, Maguire,1980). Anxiety and fear can also persist for some time following burglary (Bard & Sangrey,1979; Brown,1983; Brown & Harris,1989; Bennett,1991; Clarke & Hope, 1984; Janoff-Bulman,1985; McCann et al.,1988). However as with rape victims (Kilpatrick, Veronen & Resick,1979), these tend to remain long-term only in the form of brief "attacks", diminishing in intensity over time.

Unsurprisingly, another persistent reaction to burglary is the feeling that one's privacy has been invaded or intruded upon (Maguire,1980). Related to this is a feeling of violation of self, reported to exist for many victims, although mainly

women, both immediately and in the longterm following burglary (Bard & Sangrey, 1979; Bennett,1991; Fischer,1984a,1984b; Janoff-Bulman,1985; Korosec-Serfaty & Bolitt,1986; Maguire,1980). Interestingly, many women outwardly compare the experience with rape or use words associated with this (eg. penetrated, violated) when describing the burglary experience (Fischer,1984a; Maguire, 1980). Perceptions of home as contaminated and dirtied have also been identified in the literature as reactions which are very durable and also experienced predominantly by women (Bennett,1991; Maguire,1980). Several of Maguire's (1980) respondents reported cleaning the house following the burglary or even burning items touched by the burglar, in an attempt to neutralise such perceptions.

1.3.2 Behavioural Impact.

As with the research literature on the impact of criminal victimisation in general (Burt & Katz,1985), every study investigating the consequences of burglary on behaviour identifies significant changes, particularly in the self-protection, avoidance and insurance activities of victims (Bard & Sangrey,1979; Bennett,1991; Cook et al.,1987; Friedman et al.,1982; Lurigio,1987; McCann et al.,1988; Maguire, 1980). Many victims alter their insurance cover following burglary, and indulge in target-hardening behaviour, fitting new locks, bolts or an alarm, leaving lights and radios on when out, and becoming more careful about locking doors and windows (Bennett,1991; Friedman et al.,1982; Maguire,1980). Such actions were regarded by Maguire's respondents as for "peace of mind" as much as for practical reasons.

While the majority of victims take positive preventative measures such as those described, a minority go further, taking extreme measures such as moving residence, nailing up windows, putting furniture against doors, and keeping weapons handy at night (Maguire,1980). However such reactions are generally short-lived. Similarly, avoidance behaviours such as staying at home and not answering the door to strangers seem to fade with time. These behaviours have also been identified as a consequence of violent crime for some victims (Lurigio, 1987; McCann et al.,1988).

1.3.3 Post-traumatic Stress Disorder: Application to Burglary.

It has been suggested that the reaction of some victims of property crime justifies the diagnosis of PTSD (Waller & Okihiro, 1978; Karmen,1990). However, the application of this diagnosis to victims of minor events such as burglary has been heavily debated in the PTSD literature. The DSM IIIR (1987) diagnostic criteria includes exposure to an *extreme* stressor "outside the range of usual human experience". Some authors (eg. Green,1990) argue that this diagnosis may therefore be improper, given the frequency with which burglary occurs. Others contest that the diagnosis should be determined by the individual's *reaction* rather than the form of the event (eg. Horowitz,1983). Davidson & Foa (1991) suggest that the diagnostic criteria is actually worthless, since no normative data exists concerning exactly what is outside the normal range of human experience. Despite the debate, it appears that crime-related PTSD does exist, at least for more serious crimes (Saunders, Arata, & Kilpatrick,1990), while *some* of the symptoms of PTSD are experienced by victims of burglary. Perhaps experience of victimisation should be viewed as fitting a continuum, with PTSD as an extreme reaction, and lesser impact involving varying degrees of PTSD symptomatology.

1.4 THEORIES CONCERNING THE IMPACT OF CRIMINAL VICTIMISATION.

As research interest concerning the impact of victimisation has grown, so too has theoretical interest in this domain. Although most of this theoretical work has grown out of work on rape, disaster and violent assault, its relation to burglary has been discussed by some authors (Bard & Sangrey,1979; Janoff-Bulman,1985; Maguire,1980,1981,1982,1984, 1985). Other theories have also developed which specifically relate to burglary (eg. Brown & Harris,1989; Korosec-Serfaty & Bolitt, 1986; Maguire,1980). The theories do not compete with each other, but rather, are compatible and interdependent. Each addresses different aspects of the victimisation experience and contributes in some way to our understanding of it. While some theories focus on "how" issues, predicting patterns of response, others concern the issue of "why", explaining the reasons for particular reactions identified in research.

1.4.1 Crisis Theory.

The term "crisis theory" applies to a theoretical framework of understanding, developed through the work of several qualitative researchers (Bard & Sangrey,1979; Burgess & Holmstrom,1974; Symonds,1975) to describe and predict the psychological reactions of victims. Although it chiefly concerns violent victimisation, this widely accepted theory, closely related to grief theory, has also been applied to a variety of victimisation experiences including less serious crime such as burglary (eg. Bard & Sangrey,1979; Waller,1989). It is generally well-supported by the burglary impact literature.

Crisis theory proposes that events such as criminal victimisation can be of sufficient magnitude and novelty to create a situation of unpreparedness in the

victim, triggering a crisis state. The psychological resolution of this crisis is described as a multiphase process, through which individuals progress at different speeds. While some individuals resolve the crisis rapidly, others experience prolongation of one or more phases. Factors related to speed of resolution, (ie. characteristics of the individual, their social supports and the event) will be discussed further in Section 1.5.

The initial reaction to unexpected victimisation proposed by crisis theorists is that of shock, numbness or denial. This is followed by the reality phase, in which the victim is aroused to act with either anger or fright in an effort to cope with the event. According to crisis theorists, the third phase of adjustment involves compulsive talking and repetitive thoughts about the event. However, research indicates that for burglary victims, this phase is typically less acute than crisis theory would suggest. While victims tend to think and talk about the burglary for some time after the event, this behaviour seems rarely to be "compulsive". Phase four involves self-recrimination. According to Janoff-Bulman (1982), Miller & Porter (1983) and others, such attributions of responsibility may serve a functional purpose. By blaming victimisation on *changeable* personal characteristics or behaviour, the controllability of the event is emphasised, perceived vulnerability is reduced, and the final phase, integration and resolution is attained.

In addition to the self-recrimination of phase four, victims also overcome crisis in other ways. They may consider the offender's motives in an attempt to understand the event (Bard & Sangrey,1979), or indulge in "selective evaluation" (Taylor, Wood & Lichtman, 1983). Taylor et al. argue that the perception of self as a victim

is aversive, motivating the application of certain "devictimising" cognitive coping mechanisms. These are validated in research, and include construing benefit from the experience, focussing on positive aspects of the situation, comparing the situation with that of less fortunate others, or imagining hypothetically worse situations. This notion of selective evaluation is not incompatible with crisis theory, extending the breadth of phase four and the usefulness of the theory. Scope exists for its implementation in crisis interventions. If individuals could be encouraged to indulge in selective evaluation of the aversive event, devictimisation may be achieved and the process of adjustment accelerated.

1.4.2 Shattering of Assumptions.

A number of authors have theorised about *why* victimisation triggers adverse psychological reactions for many individuals. One theoretical viewpoint with wide acceptance was developed by Bard & Sangrey (1979), Janoff-Bulman (1983,1985), Wortman (1983), Perloff (1983) and others. This builds on earlier work of Lerner (1970) in social psychology and Seligman (1975) on control.

According to this viewpoint, the distress associated with the victimisation experience is a consequence of a shattering of individuals' assumptions about themselves and the world. Although we are normally unaware of the assumptions we hold, they are extremely important, allowing us to function in a world perceived as stable and ordered (Bowlby,1975). When our assumptions are disconfirmed by victimisation, the world we perceive is thrown into disequilibrium. Only by creating new assumptions which incorporate the experience can one's psychological distress be resolved and normal function be resumed (Janoff-Bulman,1985).

Janoff-Bulman & Frieze (1983) and Janoff-Bulman (1985) propose several assumptions as vital for effective day-to-day functioning and particularly influenced by victimisation. Firstly, individuals tend to assume that they are invulnerable, knowing that crime happens but believing "it can't happen to me". The existence of this assumption is supported by several research findings, including Skogan & Maxfield's (1981) discovery that people believe crime in their neighbourhood to be less serious than elsewhere. People also tend to believe that the world is predictable and balanced, and that events have meaning. By its very nature, burglary destroys this assumption. This causes the reactions outlined in crisis theory, and a need to restore the belief by identifying reasons for it (Janoff-Bulman & Frieze,1983).

Related to this is the "Just World Phenomenon" (Lerner,1970;1980). When others are victimised, people tend to blame the victim as deserving misfortune, in order to uphold their belief that the world is just. In line with Janoff-Bulman's (1985) theory and crisis theory, just-world theorists argue that when oneself is victimised this belief is threatened, restorable through acceptance of blame for the event.

According to Janoff-Bulman (1985), the final assumption influenced by victimisation is one's perception of self as a good and worthy person. Again, this is closely tied to the just-world assumption. At least in the short term, it is proposed that victimisation can trigger a questioning of one's self-worth and perceptions of self as weak and powerless. While this theory may apply to some victims of burglary, it is probably more applicable to victimisation involving violence.

Assumptions of invulnerability, meaning and self-worth are challenged by all forms of victimisation. However, Janoff-Bulman (1985) argues that this challenge and the consequential psychological impact is heightened in the case of criminal victimisation for a number of reasons. Firstly, these victims suffer a greater threat to their belief structures because of the fact that crime highlights immorality in the world as well as unpredictability. In addition, victims of crime are less able to attribute the event to chance than victims of disaster or accident, since they have been "chosen" by the offender. Finally, due to the just-world perception, they are also more likely to suffer a lowering of self-esteem as a consequence of the event, while being less likely to receive support and concern from others.

1.4.3 Violation of Self.

A second theory seeking to explain why victimisation leads to adverse psychological reactions in many individuals is concerned specifically with criminal victimisation. This theory, put forward by several researchers including Bard and Sangrey (1979), can actually be regarded as a sub-theory of the "shattering of assumptions" notion. Like Fischer (1984b), Janoff-Bulman (1985), Janoff-Bulman & Frieze (1983), Perloff (1983), Wortman (1983) and others, they argue that victimisation is traumatic because it destroys an individual's sense of trust, equilibrium and control over their own life, at least temporarily, and forces the individual to question their assumptions about themselves and the world. However, Bard & Sangrey (1979) postulate that for victims of crime, adverse psychological reactions are also due to the reality that they have been deliberately violated by another human being. While this violation intensifies with the severity of crime, they argue that the degree of Self-violation experienced is also

dependent on the *meaning* of the crime in a person's life. What is a minor violation for one person may be major for another.

The notion that violation of self constitutes the critical aspect of victimisation is well-supported by research concerning the impact of burglary. As mentioned, perceptions of home as being contaminated or dirtied are often reported, particularly by women. In addition, the language chosen by women to describe the experience of burglary often involves analogies with sexual assault (Fischer,1984a; Holtom & Raynor,1988; Korosec-Serfaty & Bolitt,1986; Maguire, 1980). Interestingly, the literal meaning of the French term for burglary, "voil de l'intimite", is "rape of privacy / of one's universe" (Korosec-Serfaty & Bolitt,1986).

Perceptions of self-violation following burglary are easily understood when the meaning of home and the things within it are considered. At least in western society, the house in which we live constitutes part of one's identity and symbolises safe territory; a place of refuge and privacy (Bard & Sangrey,1986; Bennett,1991; Brown & Altman,1983; Brown & Harris,1989; Korosec-Serfaty & Bolitt,1986; Maguire,1980; Van den Bogaard & Wiegman,1991). Similarly, the possessions in our homes have symbolic meanings attached to them. While most houses contain at least a few possessions of material worth, the value of property is more complex than this. Personal possessions contribute to our identity and constitute a vehicle of self-expression (Dittmar,1989,1991). They can take on varying degrees of "sentimental value" or symbolic significance when they represent the relationships, personal achievements, events, values or pleasures

which help to define self (Bard & Sangrey,1979; Belk,1988; Brown & Harris,1989; Csikszentimihalyi & Rochberg-Halton,1981; Dittmar,1989,1991).

Depending on their psychological importance to us, we exercise varying levels of control over access to and use of our home and possessions by others (Bennett,1991). When one's home is burgled, this control is lost. Safe territory and privacy are invaded and psychological bonds between victim and home/possessions are highlighted and threatened. If significant items are stolen, damaged, or even touched by the intruder, the potential for violation to be perceived again arises, along with the associated distress. Given that such items are an extension of self, Belk (1988) suggests that the loss of sentimentally-valued possessions can constitute loss of a significant part of oneself.

1.4.4 The Public Image of Burglary.

A third explanation for why victimisation can result in psychological crisis is concerned specifically with burglary. Maguire (1982) argues that the public hold preconceived views of what burglary is like, based largely on the media's portrayal of the event. The majority of media coverage of burglary, both fictitious and real, portrays images of masked intruders, ransacked and defiled residences, and crimes conducted during the night. Although this image is an inaccurate representation of the majority of burglaries (Clarke & Hope,1984; Maguire,1980), Maguire (1982) postulates that when people discover that they have been burgled, it is this "public image" that many initially react to rather than the reality of the situation. To support this theory, Maguire (1982) reports that many of the victims interviewed in his 1980 study talked of feeling relieved upon realising that things were not as bad as they had at first thought.

1.5 DIFFERENTIAL IMPACT.

There is a general agreement among researchers that as with any stressor, individuals differ in their ability to cope with victimisation. The terms "differential vulnerability/impact" have been applied to this phenomenon (Maguire,1980,1981, 1982,1984,1985; Wright,1986). However despite its acceptance, factors which may contribute to systematic inter-victim variations in reaction to burglary and other crimes have been the subject of little attention in the research literature (Sales et al.,1984). To date, no such research has been published in New Zealand or Australia. In addition, respondents who *have* considered such factors have invariably focussed only on the *academic* value of such research. *Practical applications* of the findings for police and victim assistance programmes have been ignored.

The lack of investigation into potential predictors and application of findings is unfortunate. While victim assistance programmes vary in their methods of selecting which victims to contact, all aim to reach those who most need help. Since few schemes succeed in contacting all victims of crime, any knowledge that increases the likelihood of identifying individuals suffering greatest stress would be of considerable value.

If victim services or practical support could be targeted to individuals possessing characteristics known to relate to adverse reaction, regardless of their apparent psychological state, the likelihood of victim distress being ignored by help agents could almost certainly be reduced. Of course, victims should always be considered as individuals, since exceptions exist for all trends (McCann et al.,1988), and while

adverse reactions may be more likely for some groups, they are not confined to these groups (Mawby & Gill,1987; Maguire,1984). Nevertheless, an awareness of factors *likely* to increase adverse reactions to an event would undoubtedly constitute an advance beyond decision-making based on "hunches" (Maguire, 1991).

While subject to the methodological problems identified in other research on the impact of victimisation, other problems also characterise methodology of past differential vulnerability research. Regardless of the type of victim studied, this research rarely investigated multiple variables. Of the research dealing with differential vulnerability to burglary, only Maguire (1980) and Cook et al. (1987) considered more than one or two predictor variables, with other research honing in on a very narrow range of victim or event characteristics. In addition, some of the variables investigated as potential predictors of reaction are not independent. While this is not in itself a problem, it becomes one since the statistical analyses employed have generally been limited in depth, with the *relative* importance of variables often unknown.

The literature on differential vulnerability is clearly problematic in size and quality. However, the findings are important, with some patterns already emerging strongly while other results provide a foundation for future research. Variables already investigated as predictors of reaction, or which could be investigated in the future can be categorised into two classes: characteristics of the individual, and of the event. These will be discussed in turn.

1.5.1 Characteristics of the Individual.

Apart from fleeting coverage by Bourque et al. (1978) and in the cross-crime comparisons of Cook et al. (1987) and Lurigio (1987), Maguire (1980) is the only researcher to investigate individual characteristics in relation to the differential impact of burglary. However they have been studied in relation to the impact of rape (Sales et al.,1984; Burgess & Holmstrom,1974), robbery (Resick,1987), crime in general (Davis & Friedman,1985; Friedman et al.,1982; Leymann,1985; Stuebing,1984), and by several researchers concerned with differences in fear of crime (eg. Gomme,1988; Manderson,1990).

In line with the higher incidence of anxiety disorders among females (Rosenhan & Seligman,1984), research concerned with fear of crime has almost universally found women to be more fearful than men (eg. Clarke & Lewis,1982: Meithe & Lee,1982). It is therefore unsurprising that Cook et al. (1987) and Maguire (1980) found female victims to be substantially more affected by burglary than male victims. Although it is clear that some males are strongly affected by the experience of burglary, Maguire believed that the number of men demonstrating strong reactions was too small to allow conclusions about other characteristics to be drawn. Therefore, further demographic analyses in his study were conducted for women only. The notion that the sexes differ in reaction to victimisation has also been supported in research on other crimes up to three months post-event (Leymann,1985; Lurigio,1987), explaining the decision of Brown and Harris (1989) to sample only female victims of burglary. Of course this sex difference may reflect the Western sociocultural discouragement of male demonstration of emotion, in addition to a real difference in response. It may also relate to the fact

that men and women tend to value possessions for different reasons, with men most-valuing instrumental items, which are generally replaceable, while women tend to value possessions more for symbolic reasons, thus rendering their most valued possessions irreplaceable if lost (Dittmar,1989; Kamptner,1991).

While a parallel exists between levels of fear and women's reaction to victimisation, this is not the case for age. Research suggests that the elderly are more fearful of crime than other age groups (Clarke & Lewis,1982; Jones,1987; Manderson,1990) However the relationship of victim age to the severity of their reaction to burglary and other crimes is far from clearcut. Research by Davis & Friedman (1985) and Leymann (1985) suggested that the elderly were more affected by victimisation than other age groups. In contrast, others (Cook et al.,1987; Stuebing,1984) have found that young victims were more upset by the event. Meanwhile, no age differences were found by Bourque et al. (1978), and female age-related differences in Maguire's (1980) burglary study were largely accounted for by a third variable, marital status. Investigations of age as a predictor of reaction to rape have also yielded mixed results. Early studies found older victims to be more affected by rape (eg. Burgess & Holmstrom,1974), while more recent research suggests that age influences the *pattern* of recovery rather than the severity of impact (Sales et al.,1984). Despite mixed research evidence, the elderly continue to be cited in victim literature as the group most affected by crime (eg. Victims Task Force,1992).

The factor reported as most strongly related to the severity of women's reaction to burglary by Maguire (1980) was marital status. In this study, widowed, separated

or divorced respondents were significantly more likely to have suffered "serious effects" from the burglary than married or single victims. The importance of marital status in predicting severity of reaction was backed up by a reanalysis of Bristol Victim Support Service data collected in 1974 (Maguire,1980). Although Maguire offered no explanation for this finding, the former three statuses had the commonality of loss of a partner. In Sales et al.'s (1984) research on rape, this variable was found to be unrelated to severity of impact.

As with research on fear of crime (Gomme,1988), Maguire's (1980) research indicated only a weak relationship between socioeconomic status and burglary impact severity. A slightly higher proportion of working class women were found to suffer serious effects than women fitting into the middle class. In their research on robbery, burglary and assault victims, Cook et al. (1987) reported similar patterns, with victims of higher income and education suffering less impact 6 months after victimisation than victims of lower SES.

Attention to individual characteristics in the burglary differential impact literature is limited almost exclusively to demographic factors. The influence of informal social support on victim reaction has yet to be investigated for burglary. However comparisons have been made between victims who live alone or with others. Maguire (1980) found that women who lived alone were more prone to serious effects 4 to 10 weeks after burglary than were women who lived with others. This variable only weakly predicted reaction when marital status was controlled for.

The relationship of pre- and post-victimisation social support to impact severity has been assessed in more detail for rape and violent assault (Atkeson et al.,1982; Burgess & Holmstrom,1978; Norris et al.,1990; Sales et al.,1984, Skogan,1977). The majority of this literature reports strong relationships between victim recovery and the degree of support received both before and after the event, with low support associated with greater impact. However Sales et al (1984) argue that such research typically employs crude indicators of support. Using social network reaction measures to assess post-assault support, they found a weaker relationship with victim recovery than those previously reported.

In addition to social support and demographic variables, other individual characteristics have been considered in research concerned with serious crimes. Concerning rape, researchers have found that victims are more likely to suffer serious reactions if they are intellectually retarded, severely psychotic, or drug-dependent prior to the event (Burgess & Holmstrom,1974; Atkeson et al.,1982; Sales et al.,1984). Similarly, victims of rape and violence are less likely to cope with victimisation when they already face other serious and chronic life stressors (Burgess & Holmstrom,1974; Cook et al.,1987; Sales et al.,1984) or have previously been victimised (Leymann,1985; Norris et al.,1990; Resick,1987).

McCann et al.(1988), Perloff (1983) and others propose that variations in reaction to all forms of victimisation may be due to differences in the cognitions held by individuals. Assuming that people differ in the strength of their assumptions of about themselves and the world, these authors argue that victimisation may be more traumatic when pre-victimisation assumptions are very strong. This notion

has not been tested for any crime, undoubtedly because of difficulties inherent in post-hoc assessment of previously-held beliefs.

1.5.2 Characteristics of the Event.

Individual characteristics have been the main focus in the search for variables associated with differential vulnerability. However research attention has also been directed towards characteristics of victimisation events themselves. Concerning cross-crime comparisons, little research has been conducted, and findings are mixed. Cook et al. (1987) found that crime seriousness strongly predicted degree of victim distress, while Lurigio (1987) found no clear or consistent intergroup differences on six dependent measures for victims of burglary, robbery and felonious assault.

Research literature concerned with the influence of residential burglary characteristics on victim reaction is limited to a study by Brown & Harris (1989), and minor treatment within the research of Maguire (1980), Van den Bogaard (1990) and Waller & Okihiro (1978). In investigating the role of burglary characteristics in reaction severity, monetary value of losses was not found by Maguire (1980) to relate significantly to the event's psychological impact on victims. Brown & Harris' (1989) results were similar, with no significant relationship identified between value of loss and burglary's psychological impact, except in terms of perceived future risk of burglary. Unfortunately, to date no research has been published on the influence of victim insurance status on the importance of financial loss as a predictor of impact severity.

Maguire (1980) examined the relationship of event factors such as whether or not the victim was confronted, whether they were home at the time of the offence, and at what time the offence occurred. Again these factors were found to be unrelated to severity of impact. In fact, the only event characteristic which was related to the differential vulnerability phenomenon in Maguire's research was whether or not "ransacking" or excessive disarrangement and/or damage to property had occurred. This relationship was also identified as significant by Brown & Harris (1989), and is further supported by Waller & Okihiro's (1978) finding that victims were more likely to report burglary when ransacking had occurred.

Brown & Harris (1989) investigated the relationships which degree of territorial violation and sentimental value of stolen property have to the severity of burglary's impact on victims. As expected, they found that the intensity of psychological impact increased with extensiveness of intrusion, assessed in terms of the number of rooms entered and importance of these rooms to the victim. Concerning the sentimental value of property, Brown and Harris found only partial support for a link between sentimentally-valued losses and severity of impact, with individuals who experienced sentimental *and* monetary losses scoring significantly higher on perceptions of vulnerability and burglary risk than other victims. A stronger finding was obtained by Van den Bogaard (1990), with victims who lost emotionally-valued possessions identified as more fearful and more upset following burglary than victims losing less-valued possessions or nothing at all.

It was suggested by Lorenz (1966) that the degree of burglary's psychological impact on victims may relate to the importance which individuals apply to their homes. While this fits with theoretical work by Bard & Sangrey (1979), Korosec-Serfaty & Bolitt (1986), Brown & Altman (1983) and Brown and Harris (1989), Maguire (1980) found no relationship between impact severity and degree of attachment to home. Further, Waller & Okihiro (1978) found no support for a similar relationship with length of residence. However, neither study used robust measures of impact, or probed the importance of home in any systematic or validated manner. Rather, they relied on the unsubstantiated assumption that attachment is reflected in such things as the amount of money spent on renovations or length of residence.

Anecdotal evidence reported by Maguire (1980) and Stenross (1984) suggests that burglary victims' coping is enhanced when police present a sympathetic attitude and conduct fingerprint dusting and a search of the property. According to Stenross, these "ritual activities" restore victims' peace of mind by fostering the impression that "something is being done". Research is needed to investigate whether the act of fingerprinting has any clear influence on the psychological impact of burglary victimisation.

The relationship of police reaction to victim impact has been examined by Van den Bogaard (1990) and Rosenbaum (19870, respectively in terms of type of information disseminated to victims and demonstration of empathy. Although interventions did not significantly reduce psychological impact, they did increase positive preventative actions, while reducing*excessive* preventative actions or

retributive desires, and strengthening feelings of efficacy and satisfaction with the police.

1.5.3 Summary of Findings.

As for all forms of victimisation, the research literature concerned with the differential vulnerability/impact phenomenon in victims of burglary is still in its infancy. While a small body of literature has emerged, many variables which may relate to severity of victim reaction to burglary are yet to be investigated. These include aspects of police response, the outcome of the case, previous victimisation, and the victims' insurance cover, psychological state, belief structures, and life stressors prior to the event. Of the factors for which the relationship with burglary's impact severity has been investigated, most have been the subject of exploratory research only. Therefore, a profound need for replicative research exists.

Differential impact research concerned with more serious crime such as rape has involved a greater number of multiple investigations of particular variables than has occurred in the burglary literature. However, many inconsistencies exist in knowledge regarding the relationships of factors such as age, socioeconomic status, social support and manner of police handling to the severity of impact on victims. As a consequence, replicative research is also needed for these crimes, in order to confirm, refute or clarify such relationships. As well as identifying valid predictors of differential impact for these crimes, findings would also be of use for cross-crime comparisons regarding differential vulnerability of victims. From the evidence available so far, it seems likely that some predictors of impact severity may apply to several forms of victimisation.

1.6 PRESENT STUDY.

Many justifications exist for the current research focus. Obviously a need exists for all types of victim research at present, given the profile of victims in legislation and the community in recent years. However the lack of Australasian investigation into differential impact, coupled with the many disparities in the literature in general, makes this topic especially pertinent. Due to the frequency of burglary in New Zealand at present, findings of this research will be directly relevant to a sizeable victim population, as well as to wider differential vulnerability theory. The previous lack of recognition regarding the practical applications of findings on prediction of victim reaction for police and victim support agencies has already been stated.

There are numerous variables which require investigation concerning their relationship to severity of victim reaction to burglary. This need for research exists either because they are yet to be investigated, or require replication in different cultural settings or using stronger measures or statistical analyses. However, in order to comply with time limitations, maintain statistical power and keep the quantity of results within manageable proportions, the number of independent variables investigated in the present study had to be restricted.

Careful consideration was given to the decision of which independent variables to investigate. Given the multicausal/multivariate nature of differential vulnerability, and the interdependence of many potential predictors, the researcher opted to explore as many factors as possible within the aforementioned constraints. It was decided to include characteristics of both the event and the

victim in the investigation. Effort was given to the inclusion of characteristics on which information is normally known by police following the initial crime report (eg. sex, approximate age and perhaps marital status of reporter, extent of disarrangement and loss). This emphasis was made to ensure that at least some research findings had practical use to the police within their *current* procedures. Obviously findings concerning the relationship of other variables to reaction could also be applied if the relevant information was collected from victims by police.

Of all factors considered, twelve were included as independent variables in the present study, five of which were characteristics of the burglary. These variables, and the rationale for their inclusion are:

Victim Characteristics.

Age: The elderly are frequently cited as most affected by all crime, yet research evidence concerning property crime has been mixed, requiring further research utilising quantitative measures of impact severity.

Marital Status: Maguire (1980) cited this as the strongest predictor of reaction, yet offered no explanation as to why this may be. His conclusion was not backed up by Sales et al.'s (1984) work on rape, and was based on severity ratings made by a panel of non-experts on the basis of qualitative interview data. Further investigation was required on this variable utilising more objective measures of impact.

Live Alone: While previously investigated by Maguire (1980), this variable required replicative research using quantitative methodology.

Social Support: Neither pre- or post-event support have previously been considered regarding their influence on reaction to burglary. In the absence of prospective data on this, analysis was restricted to post-event support.

Life stress: Serious pre-victimisation life stress has been identified as a significant predictor of victim reaction to serious crime. It was important to determine whether this also holds for more minor crimes such as burglary.

Insurance: The author was interested in determining whether or not insured victims are less upset than uninsured victims following burglary. This had not been investigated prior to the current study, even though one would expect some influence, particularly in situations where substantial loss has occurred.

Previous Burglary: Although the influence of prior victimisation has been investigated fleetingly for victims of rape and violence, its influence on reactions to less serious as crime had not been ascertained, necessitating further research.

Sex was not included as an independent variable for a number of reasons. As we have seen, victim sex has been repeatedly identified as predictive of reaction severity, with females typically suffering greater distress than males. Although further replication is always desirable, the finding is already fairly robust. The present study focussed only on female victims, not because of a denial that men can be strongly affected by burglary, but merely in an effort to strengthen the power of other statistics. Since fewer men *tend* to react severely compared with women, the sample size would have to be very large to allow valid analyses of other characteristics for the male subsample. The choice of a female-only sample was also made in light of the fact that males are typically less willing than females to discuss their feelings, particularly with a stranger of the opposite sex.

Event Characteristics.

MonetaryValue of Loss: Although previously researched for burglary, this variable required replicative research to clarify its relationship to victim reaction, given that for many non-victim observers it constitutes the primary measure of a burglary's severity.

Sentimental Value: The relationship of this variable to reaction severity has previously been investigated by Brown & Harris (1989) and Van den Bogaard (1990). However Brown & Harris' research involved a rather small sample, and both operationalisations of the variable were simplistic. Further research was needed using a larger sample and considering *degree* of value, both sentimental and monetary.

Police Handling: Previous investigations concerning police handling have focussed only on the type of information given to victims (Van den Bogaard,1990) and the effects of empathy training of police on victim reaction (Rosenbaum,1987). The more "grassroots" issue of whether victim reaction is affected by a police visit following the burglary (to conduct fingerprinting or to discuss issues relating to the event) has not previously been investigated. Given the anecdotal evidence available, this variable also required research.

Disarrangement of Residence: The significance of this as a predictor of victim reaction has been identified in prior studies. However, multivariate analyses to determine its *relative* importance compared with other variables associated with degree of violation had not been conducted prior to the current study.

Degree of Territorial Intrusion: Although previously assessed in a US study, replication was needed in a different cultural setting. Like disarrangement, multivariate analyses were also needed to determine this variable's*relative* power

as a predictor of victim reaction, as compared with other variables associated with degree of territorial violation.

1.6.1 Hypotheses.

The hypotheses put forward for the present study are as follows:

1. *Victims aged 60 and over will be no more affected by residential burglary than victims of other age groups.*
2. *Widowed, divorced and separated victims will be no more affected by residential burglary than married, defacto or never-married victims.*
3. *The psychological impact of residential burglary will be less severe for victims who live with one or more adults than for victims who live alone or with persons under the age of 16 only.*
4. *The level of psychological impact which residential burglary has on victims will be influenced by the level of post-event support which they have received.*
5. *The psychological impact of residential burglary will be greater for victims who have experienced stressful life events additional to the burglary in the last six months prior to assessment than for victims for whom the burglary was the only significant life stressor in recent months.*
6. *The degree of psychological impact which residential burglary has on victims will be related to their level of insurance, with impact greater for uninsured victims than for those with partial or full insurance on their possessions.*
7. *Victims who had previously been burgled will react more severely to the latest residential burglary than will victims to whom the experience is new.*
8. *The monetary value of items stolen will be predictive of the impact which residential burglary has for uninsured victims, but not for victims with full insurance cover or for the victim sample in general.*

9. *The psychological impact of residential burglary will increase with greater sentimental value of losses.*
10. *The degree of psychological impact which residential burglary has on victims will be positively related to increased disarrangement to the victim's home.*
11. *The psychological impact of residential burglary on victims will increase with greater territorial intrusion (ie. number and importance of rooms stolen from or disarranged).*
12. *Longterm emotional reactions and perceptions of intrusion, violation and loss of trust will be less severe for victims who received direct police contact following reporting than for those who received only indirect contact with police.*

Chapter Two

METHOD

2.1 RESPONDENTS.

2.1.1 Selection of Respondents.

The researcher approached Detective S.J. Manderson of the Christchurch Police C.I.B. to discuss the viability of conducting a study on the reactions of adult female victims of crime in Christchurch. Following an informal meeting with the head of the C.I.B., ethical approval was obtained from appropriate Police agencies and from the Department of Psychology, University of Canterbury. Following approval, a list of victims burgled in the Christchurch city police district was generated from the Police computer. Addresses and telephone numbers were obtained manually from crime report files.

Selection was confined to the time period March 1 to April 20, 1992 to restrict, as far as possible, variation in the length of intervening time between burglary and interview. Since interviews were conducted throughout May and June, 1992, this ranged between 8 and 11 weeks, with most victims interviewed within 9 weeks of the crime.

Although selection was intended to be random, this was not fully possible. This was due to the low number of female-reported burglaries, and the fact that details could only be obtained regarding those victims whose police files were currently inactive (ie. not under investigation by the police at the time of access, and therefore held in police archives). Instead, all females who reported residential burglaries in the sample time period (N=105) were included in the sample, along with 39 others, systematically sampled from a group identified in Electoral Rolls as

spouses of male reporters. The sample of 144 victims constituted 26.9% of the 535 residential burglaries in urban Christchurch in the time period sampled.

2.1.2 Initiation of Respondents.

Victims in the sample were initially contacted regarding the study by means of a letter, signed by Detective Manderson and on police letterhead. This measure was taken to assure subjects that their identity had been *legitimately* obtained from police records. The letter mentioned that the research was being conducted by Detective Manderson *and* the researcher, again in order to legitimise it and comply with police regulations and the Wanganui Computer Centre Act, 1976.

The letter gave the project's aim as the investigation of the impact which burglary has on its victims. It indicated that findings would be of value to the police and social support agencies, identifying needs of victims in order for assistance to be improved in the future. Victims were informed that participation was voluntary and that their identity would only be known by the researcher and the police. The letter then informed victims that the researcher would contact them by telephone within the next few weeks to find out whether they wished to participate, and if so, to arrange an interview. Once subjects agreed to participate, they were asked to read and sign an informed consent form at the beginning of the personal interview. (See Appendices A and B for copies of the letter and informed consent form).

Of the 144 victims contacted, 102 agreed to be interviewed, 19 refused to participate in the study, while 23 had moved residence since the burglary, and could not be located. Of the refusers, 7 still felt too upset to talk about the burglary, 10 were either "too busy" or "not interested", and 2 refused because of dissatisfaction with the police. The response rate for the study, accounting for

refusals and unreachable victims, was 70.8 percent. Although a further 7 women were contacted, they denied being burgled and were thus regarded as coding errors, omitted from the above sample figures. The 7 victims interviewed for the pilot study were randomly selected from the pool of reported burglaries in the Papanui district in February, 1992.

2.1.3 Demographics of the Respondent Sample.

The demographic characteristics of the respondent sample are provided in Table 1. As shown, the age group most represented in the sample was 25 to 39 years (40.2%), followed by 40 to 59 (34.3%), 15 to 24 (17.7%) and 60 years and over (7.8%). Exactly half of respondents were married, 14.7% had never married, 8.8% were widowed, 15.7% were divorced and 10.8% were separated at the time of the burglary. Of the respondent sample, 75.5% lived with at least one other adult. The majority were fully insured (67.6%), while 11.8% had partial insurance cover on possessions and 20.6% had no insurance. Of the respondents, 55.9% had been burgled prior to the burglary in question. Just over 1/3 (36.3%) had been contacted by victim support since the burglary. For the majority, this contact had come at least two weeks following the burglary.

Comparison of the sample age distribution with that of the Christchurch city adult population in general (Department of Statistics,1991) showed a strong over-representation of 15-39 year olds in the victim sample. Forty to fifty-nine year olds were also slightly over-represented, while a far lower proportion of victims were aged 60 and over than in the population in general. When marital status was considered, married, divorced and separated women were over-represented in the victim sample compared with the general adult population, while never-married

and widowed individuals were under-represented as victims. (Separated and divorced groups were coded separately, in light of the finding that these groups differed in the present sample, with divorcees tending to be less well-off than separated victims.)

Table 1. **Demographic Characteristics of the Respondent Sample.**

Characteristic:	*N*	*Percent*
Age		
15-24	18	17.7
25-39	41	40.2
40-59	35	34.3
60+	8	7.8
Marital Status		
Never Married	15	14.7
Married/Defacto	51	50.0
Divorced	16	15.7
Separated	11	10.8
Widowed	9	8.8
Live Alone		
Yes	25	24.5
No	77	75.5
Insurance		
Full Cover	69	67.6
Partial Cover	12	11.8
No Insurance	21	20.6

The sample covered all socioeconomic levels, although victims of lower socioeconomic status predominated. Few victims were of upper SES status. (SES was determined crudely via appraisal of approximate house value, suburb, whether the home was owned or rented, and victim occupation.)

2.1.4 Characteristics of the Burglaries.

Of the burglaries sampled, 51.1% had taken place during the day, 38.5% at night, while 10.4% of respondents were unsure of when the burglary had taken place. The average value of losses was $1710.80 and the range, $0.00 to $10000.00. Ratings of disarrangement ranged from the minimum 1 to the maximum rating of 7, with a mean of 2.53 and a standard deviation of 1.84. The mean rating of sentimental value of losses was 3.78 out of a possible 7, and the range, 7. Degree of territorial intrusion varied widely, from scores of 1 to 21 (mean=7.60).

2.2 PROCEDURE.

Data was collected by means of a face-to-face interview involving two sections; one open-ended and one structured. This methodology was chosen in favour of telephone or postal survey methodologies:

-to ensure that victims understood what was required of them

-to allow the participation of victims with low written language skills

-to allow victims an opportunity to express in their own words what happened and how it affected them

-to minimise exploitative researcher-subject relationships by meeting victims on their own ground and minimising revictimisation by arranging victim support if required by respondents

-because this methodology generally achieves higher response rates than

alternative methodologies, particularly where respondents are unlikely to have prior experience in research (Dane,1991; Miller,1991).

2.2.1 Researcher.

All interviews were conducted by the author, a 24 year old female postgraduate psychology student.

2.2.2 Setting.

Interviews were conducted at a time and place of the respondents' choice. While most interviews were conducted in their own homes, a few women chose to be interviewed at their workplace.

2.2.3 Interview.

The interview comprised two parts. In Part A, which was tape-recorded, open-ended questions gave respondents an opportunity to describe, in their own words, the burglary itself and how they had reacted to it. Part B involved a structured interview in which the behavioural, emotional, cognitive, social support, sentimental value and disarrangement rating scales were presented, along with closed-ended questions concerning characteristics of the burglary and the victim. The entire interview usually took approximately 30 minutes to complete, although up to an hour for respondents still traumatised by the burglary.

2.2.3.1 Interview: Part A.

At the outset, respondents were verbally instructed that there were two parts to the interview, and that the first would be recorded on audio tape. In an effort to "jog" respondents' memories and bring the burglary back into focus, respondents were first asked to think back to the time of the burglary, and to describe what happened. If several incidents had occurred in the last few months, they were told the date of the burglary in question. For respondents who seemed nervous or unsure of what to say, the following more specific questions were asked at this point:

-Who in the household discovered the burglary?

-How did the burglar(s) get into your home?

-What sort of things were taken?

-Was there any damage done to your home?

-How did you react when you found out about the burglary?

As well as refocussing the respondents' attention on the burglary and establishing rapport, this background information was employed to validate the quantitative data of Part B.

2.2.3.2 Interview: Part B.

Respondents were instructed that more specific questions would now be asked, and were requested to answer as accurately as they could, questioning anything that they were unsure of. The second part on the interview began with less-stressful questions concerned with the burglary itself (ie. the manner in which it was dealt with by police, value of property taken, disarrangement, sentimental value of property lost, and which rooms were stolen from or messed up). Dependent measures and the social support scale were then presented, with the interview concluding with collection of data concerning the victims themselves.

For all items in the interview involving likert-type scales, respondents were shown A4-size cue cards with the appropriate scale printed on it. After having the task explained, respondents indicated their chosen point on the scale, either verbally or by pointing to the appropriate number. In situations where respondents found it hard to rate an item, or appeared to the researcher to have misunderstood an item, the researcher repeated the anchors and if necessary, the item.

2.3 DEPENDENT MEASURES.

Because the researcher was interested in the *overall* impact of the victimisation experience on individuals, assessment of behavioural, cognitive and emotional reactions was desired. A search of PSYCLIT, recent Psychological Abstracts, the

victim impact literature and several psychometric publications (Miller,1991; Buros,1975) was conducted to identify instruments capable of measuring the psychological impact of crime on victims.

Most studies concerned with the psychological impact of victimisation have limited their choice of instrument to measures of general emotional state at the time of assessment (eg. Derogatis & Spencer's Brief Symptom Inventory, McNair, Lorr & Droppleman's Profile of Mood States), or to base rate-less measures of specific emotions as *currently* experienced (eg. Beck Depression Inventory, Hamilton Psychiatric Rating Scale for Depression, Veronen & Kilpatrick's Modified Fear Survey, Cook et al.'s adaptation of Spielberger, Gousuch & Leshene's State-Trait Anxiety Inventory). Instruments specifically designed to assess the impact of victimisation have mostly emerged from two clinical sources; research into PTSD and combat (eg. Derogatis' Symptoms Checklist 90-Revised, measuring nine pathological reactions; Horowitz, Wilner & Alverez' Impact of Event Scale, assessing avoidance and intrusiveness of thoughts) and concerning the psychological consequences of rape (eg. DiVasto's Rape Trauma Syndrome Rating Scale). Both the SCL-90-R and the IES have been applied to victims of crime. However the former is reported by McCaffrey, Hickling and Marrazo (1989) to have low validity for non-combat victims, while the IES measures only a narrow range of cognitive reactions.

Regarding emotional responses to criminal victimisation, several purpose-developed instruments have been employed. Unfortunately only those of Cook et al. (1987) and Van den Bogaard (1990) related directly to the impact of non-sexual

crime. Cook et al. reportedly developed short scales measuring stress, dismay and social adjustment resulting from victimisation. However these unpublished measures were developed with minimal pilotting. In addition, they lacked standardisation and normative data. Similarly, Van den Bogaard's questionnaire assessing specific dimensions of psychological impact is unpublished, purpose-developed and unstandardised.

After consideration it was concluded that the available instruments were unsuitable for the present study. Use of instruments developed for assessing victims of rape was rejected because items were generally very specific to this experience, and because of obvious differences in objective seriousness of the events. Thus, construction of scales to measure emotional and behavioural reactions to burglary, and partial construction of cognitive measures was seen as necessary if quantitative data was to be gathered in the present study. Disadvantages of this approach, such as the lack of normative data and the potential for less-than-ideal validity were recognised. However, purpose-constructed scales, grounded in past research, were seen as the best available means of quantifying and describing victim reactions.

2.3.1 Scale Development.

The measures of immediate and longterm emotional reaction employed in the present study were constructed following an extensive review of relevant research literature. Since many emotions are associated with the experience of victimisation, any number of which can be experienced at once to varying degrees, it was decided to have a composite emotional impact score. To determine which emotions shuld be included, results of the phenomenological and quantitative

studies were analysed and emotions reported in each study were noted. Emotion labels synonymous with another more commonly used term were then eliminated, as were general emotion labels such as "upset". Feelings of panic, tearfulness, trembling, insomnia and nausea were summed with the word "anxiety".

Although it is desirable to have both positive and negative items in any likert-type questionnaire, "calm" was the only "positive" emotion included, as other positive or neutral emotion labels were considered either redundant or unlikely to be reported as reactions to burglary, invariably a negative experience. Thus, the resulting scale listed 10 emotions (angry, shocked, anxious, fearful, sad, guilty, calm, numb, insecure, depressed), one of which (calm) was reverse-scored.

In the pilot study involving 7 victims, 5-point likert-type scales were used. However after 4 interviews, the instrument was altered to a 7-point scale. This change was made because the 5-point scale did not adequately reflect the variations in reaction evident in victims' own reports of how they felt. Although very rigid anchors (eg."like being lost in a crowd") have been employed in some recently developed scales (eg. Robertson, 1991), achieving a perfect measure of emotion remains unattainable, since events are experienced differently by individuals. Therefore, one scale, using only loose anchors of points 1, 4 and 7, was employed in the emotion instrument. Pilot victim scores appeared to reflect the general level of impact expressed by victims in their own words, with higher scorers expressing greater distress. Respondents were asked for feedback and generally expressed approval of the scale, and felt that most emotional aspects of

their burglary experience were included in the scale. Consequently, the instrument was retained following pilotting.

Ideally, development of the emotion scale for the present study would have involved meticulous checks beyond those of face validity. Tests of internal consistency could have been made, and items of low validity or poor differentiation eliminated to ensure that scores did in fact reflect level of emotional impact. In addition, convergent and divergent validity could have been determined via further testing. However, such procedures require more time and a much larger pilot sample than was available for the present study. Given the current lack of research literature concerning victims, particularly in Australasia, research of all types is desperately needed. For these reasons, and because the instrument was based heavily on findings of past research and had considerable face validity when victim's spontaneous self-reported feelings were considered, it was considered justifiable to use the present instrument, while acknowledging its faults.

Although a number of cognitive reactions have been reported in past research (see Section 1.3.3), it was decided to focus on *elements* of victim impact, limiting testing to three constructs; loss of trust, violation, and cognitive intrusiveness. These constructs were chosen because they were conceptually separate, were expected to be easily tapped via likert scales, and because at least some of the respondents were expected to still experience these phenomena to significant degrees by the time of the interview. All cognitive scales focussed on present perceptions, since retrospective recall of past beliefs is notoriously poor (Myers,1987).

Construction of the cognitive impact scales followed a process similar to that used for the emotion scales. A search of the qualitative research literature was undertaken to identify victim statements which reflected perceptions of loss of trust or violation, or cognitive intrusiveness. Redundant statements were eliminated, leaving a collection of statements for each construct. For the Violation and Loss of Trust Scales, four of these were then modified to a present-tense form, which was extreme enough that some victims would be expected to find little or no truth in it for them, while others would see it as very true. A fifth positive (ie. reverse-scored) statement was also constructed, to indicate no such perception. For the measure of intrusiveness, two items with considerable validity in their original instrument were borrowed from the IES, with tense changed to the present ("Things I see or hear remind me of it", "Any reminder brings back emotions related to it"). These were supplemented with two items generated from statements frequently reported in qualitative research, and one positive item generated by the researcher.

After pilotting on seven victims and assessment by at least four non-psychologist members of the general population, one item from the trust subscale ("The burglary has not changed my view of people") was changed (to "My view of people is the same as before the burglary"). This alteration was made since some respondents found the original item difficult to rate on truthfulness because of the word "not". In addition, the 5-point likert scale used in pilotting was extended to 7-point for the study, for the same reason as the change to the emotion scale.

In order to determine the internal consistency of the cognition measures, item-total correlations were calculated for each of the scales. All correlations were significant, ranging from .55 to .83 for the Intrusion Scale, .63 to .74 for the Loss of Trust Scale, and .54 to .78 for the Violation Scale. With internal consistency adequate for all scales, all items were retained in data analysis. (See Appendix F, Table 28 for item-total correlational data.)

The third dependent measure developed for the present study was a security consciousness change rating. This was designed as an indicator of victims' *subjective* perceptions of their degree of behaviour change since the burglary. It was included in response to previous research findings that many victims become increasingly security conscious following the experience of burglary, changing behaviour patterns to decrease the likelihood of revictimisation. The other measure of behavioural impact, the Security Behaviour Checklist, was compiled from reported security behaviour changes made by some respondents in past studies (eg. Friedman et al.,1982; Maguire,1980), and constituted an indicator of degree of post-victimisation behaviour change.

2.3.2 Scales Employed to Assess Impact of Victimisation.

A) *Emotion Rating Scales: Immediate Impact and Lasting Impact.*

Subjects rated the degree to which 10 emotions were experienced in the first 24 hours after discovering the burglary, and for their feelings about the burglary at the time of the interview. A 7-point likert-type scale was used (1= not at all, 4= quite a bit, 7= extremely so- the most I ever felt like this), with item scores summated for each of the scales to represent overall emotional impact. Measures of

immediate and lasting impact were presented temporally separately and with items ordered differently to minimise reporting biases.

B) *Cognition Rating Scales.*

Three scales were used to measure the cognitive impact of burglary, in terms of intrusiveness, loss of trust, and violation. Five statements were presented for each, and were rated according to their truthfulness for the respondent, using a 7-point, likert-type scale (1= not at all true, 4= quite true, 7= extremely true). Scores were summated for each scale.

C) *Security Consciousness Change Scores.*

Following presentation of a definition of security consciousness, respondents rated their level of security consciousness retrospectively for the times prior to and immediately after the burglary, and at the time of the interview, using a 7-point likert-type scale (1= not at all security consciousness, 4= quite security conscious, 7= extremely security conscious). Short- and long-term change were recorded, with these taken as the difference between pre- and post-burglary, and pre-burglary and present scores respectively. A Security Behaviour Checklist was also employed to assess behavioural reactions to the burglary. This was scored out of 5, depending on the number of different changes made by respondents to their security behaviour of physical security of their home. (See Appendix C for Emotion Rating Scales, Cognition Subscales, and Security Behaviour Measures).

2.4 INDEPENDENT MEASURES.

2.4.1 *Barrera-Adapted Inventory of Socially Supportive Behaviours.*

This instrument is an adaptation of Barrera, Sandler & Ramsay's (1981) ISSB, designed to assess, in a wide range of populations, the degree to which individuals

receive aid and assistance from those around them. The ISSB has been applied in previous research on victims (Norris,1990). Being a 40-item questionnaire, it was too large for use in the present study. Therefore, the instrument employed in the present study comprised 5 items drawn from the ISSB on the basis of reported test-retest reliability and item-total correlations for the original instrument, expected ease of understanding and relevance to the sample population, and applicability to assessment of an individual's post-event support level. Following pilotting, the 5 items were retained in the same form as in the original scale, with subjects required to rate the frequency with which the events had occurred in the last month. (See Appendix C for the Barerra-Adapted Inventory of Socially-Supportive Behaviours.)

2.4.2 *Rating of Disarrangement to Residence.*

A 7-point likert-type scale was designed for the present study, on which victims were asked to rate how "messed up" the burglar(s) had made their residence. Disarrangement ratings were validated against victims' own descriptions of what happened, elicited earlier in the interview. In situations where the rating did not reflect the reported aftermath, victims were probed further, and if justified, the rating was adjusted to standardise ratings between respondents. (See Appendix C for the likert-type Disarrangement Scale.)

2.4.3 *Rating of Sentimental Value of Property Stolen.*

A 7-point likert-type scale was developed for the present study. After being read a definition of "sentimental value", victims rated the sentimental value (to them personally) of the property which they were *most upset* about losing. This was specified to avoid attempts by respondents to average the sentimental value of all property lost, a process expected to produce values of little meaning. The rating scale is presented in Appendix C, and the definition in Appendix D.

2.4.4 *Rating of Degree of Territorial Instrusion.*

This measure was designed for the present study. Degree of territorial intrusion was represented by a single score, reflecting both the number of areas in the house *stolen from* or *disarranged* by the burglar(s), and the *importance* of this room to the occupant. In the development of the scale, five house areas/rooms were rated according to their importance to self. An example of the calculation of territorial intrusion follows.

Area	Weight	No. Entered During the Burglary	Score
sleeping area	4	2	8
living area	3	1	3
kitchen	2	1	2
garage	1	-	-
other	1	-	-
		Intrusion value	=13

The Territorial Intrusion Scale is presented in Appendix C.

2.5 OPERATIONAL DEFINITIONS.

2.5.1 Residential Burglary.

For the purpose of the present study, residential burglary was defined as:

where a building of private residence had been entered, without the permission of the occupants, by a person either known or unknown to them, and property either stolen or attempted to be stolen.

This definition excluded from the sample burglary of business establishments, and burglaries in which theft(s) were from outside the home only, with no building(s) entered. Consequently, it differs from the more complex police/legal definition of burglary.

2.5.2 Burglary Victim.

For the purpose of the present study, a victim of burglary was defined as:

a person, aged 15 years or over, who lived at the burgled residence and whose property was either stolen or attempted to be stolen.

Naturally children under the age of 15 and living at a burgled residence are victims also. However their inclusion in the sample was beyond the scope of the present study.

2.5.3 Psychological Impact.

Obviously the psychological impact of burglary is a multi-facteted phenomenon. However for the purposes of the present study, this term refers to immediate and longterm emotional reaction, the cognitive intrusiveness of the event, and loss of trust and perceptions of violation arising from the experience (ie. the aspects of impact assessed by the non-behavioural dependent measures of the present study).

2.5.4 Intensity/Severity of Impact/Reaction to Burglary.

References are made in the present study to victims' *severity* of reaction to burglary, and to the *intensity* of burglary's impact on victims. These expressions relate to victim scores on the dependent measures employed, with high scores seen as indicative of *greater* impact/reaction severity, and low scores, *lower* impact/severity of reaction.

2.5.5 Monetary Value of Property Stolen.

Monetary value of property stolen was elicited by asking victims to name the approximate *replacement value* of the property, rather than the amount paid out by insurance or the value paid for the property. In situations where all property was recovered by the police shortly after the burglary, the value of property stolen was recorded as zero.

2.5.6 Sentimental Value of Property Stolen.

For the purpose of the present study, sentimental value was taken to mean:

that something is valuable to the respondent not because it is expensive, but because it reminds them of events, people and things that are important to them.

The definition presented to victims reflected this interpretation of meaning, and was derived from analysis of various dictionary definitions as well as consultation with several individuals of both psychology and non-psychology background.

2.5.7 Security Consciousness.

Security consciousness was defined as:

trying to prevent one's home from being burgled, by doing things like

-fitting locks to doors and windows

-always locking doors and windows at night and when out

-installing devices such as alarms and security lights around one's house

-belonging to Neighbourhood Watch or keeping an eye on houses near one's own

-reporting suspicious things one sees to the police.

The definition presented to victims reflected this interpretation of meaning, based on that of Maguire (1980).

2.5.8 Insurance Cover.

The level of contents insurance cover possessed by respondents at the time of the burglary was coded into three categories; 1) "full cover", 2) "less than the true value of what I/we own", or 3) "no insurance". The coding "full cover" was used if respondents indicated that they had received a full replacement from their insurance company of property lost, paying only a moderate excess. If the excess was high enough that victims received substantially less than the value of the loss, the insurance was coded as 2). Victims with no contents insurance, or to whom the insurance company refused to pay out for the burglary, were coded as category 1). These categories were used in preference to complex calculations of adequacy of insurance cover, since many respondents were unclear of their exact coverage, excess or payout conditions, because their partners handled insurance formalities.

2.5.9 Previous Burglary.

A victim was coded as having previously been burgled if any private residence had been unlawfully entered and items stolen or attempted to be stolen at a time they personally had resided at that address.

2.5.10 Live Alone.

A person was coded as living alone if they were the only permanent occupant of the residence at the time of the burglary, or if the only other permanent occupants were aged 16 years or under.

2.6 VALIDITY CHECKS.

Potential for error exists whenever people are required to report information retrospectively. This potential is heightened when that information concerns feelings or beliefs, constructs particularly fallible given the reconstructive nature of memory. Although this problem could not be eliminated in the present study, efforts were taken to minimise this by focussing only on current beliefs. Where retrospective measures of emotion were made, respondents were first required to describe what had happened and explain in their own words how the event made them feel, in order to refocus attention on the event. In addition, it was stressed to respondents that they should try and answer questions as accurately as possible.

2.7 DATA ANALYSIS.

Analyses of the quantitative data were conducted on an Apple Macintosh using the statistical software package, Statview. After considering the options available and their relative appropriateness to the dataset of the current study, five types of statistical test were conducted in data analysis. Analyses of variance and t-tests were employed for categorical independent variables, to determine whether or not observed between-group differences arose by chance or were attributable to the independent variables. Correlation and simple and multiple regressions were used for analyses involving continuous independent variables. These tests determine the strength of relationship between two variables, and how such variables account for variations in dependent results across a sample. Results of these statistics were taken as significant if the p-value was $<.05$.

Chapter Three

RESULTS

The results of the present study will be presented in three sections. Firstly, results of intercorrelations between the six dependent measures will be outlined. This will be followed by descriptive statistics obtained via the dependent measures. Thus, Sections 3.1 and 3.2 provide background information on the validity of the instruments employed as indicators of psychological impact and on the nature of victim reactions. In the third section, results pertaining to the main focus of the research, the differential impact of residential burglary are presented. Where appropriate, responses from the unstructured interview will be used to illustrate empirical findings.

3.1 CORRELATIONS BETWEEN DEPENDENT MEASURES.

In order to determine the extent to which the dependent measures employed in the present study were valid indicators of the psychological impact of residential burglary, correlation coefficients were calculated. This statistic indicates the strength of association between variables.

The results of the intercorrelations are presented in Appendix E1, Table 10. All correlations between the three cognition and two emotion scales were significant at the .001 level, with *r* values ranging from .506 (between Loss of Trust and Immediate Emotion) to .768 (between Longterm Emotion and Violation). Thus, an individual's score on any one of the measures was rather closely related to their scores on the other measures, and for Violation, and Immediate and Longterm Emotion, this relationship was very close.

While validity was supported by the correlational analyses for the Immediate Emotion, Longterm Emotion, Intrusiveness, Loss of Trust and Violation scales, this was not the case for the Security Behaviour Checklist. Of the correlations

between this and other dependent measures, only one, between this and the Intrusiveness measure, indicated a significant association, with $r = .286$, $p<.01$. In retrospect, this finding was unsurprising given that the decision to purchase security-enhancing devices is influenced not only by fear and other emotional responses, but also by one's financial position, whether one's home is owned or rented, conditions imposed by insurance companies, whether one is moving residence in the futuren and the like. Given that scores on this measure only weakly related to the other measures of psychological impact, it appears that it reflected some other response to victimisation. Therefore, it will not be included in the bivariate and multivariate analyses of Section 3.3.

3.2 THE PSYCHOLOGICAL IMPACT OF RESIDENTIAL BURGLARY.

Results from each of the dependent measures will be presented in turn, along with relevant findings from the unstructured interview. Where results are presented within text, the figure representing percentage of sample is given, followed by the N in brackets.

3.2.1 Immediate Emotion.

Results from the Immediate Emotion Scale demonstrated wide variations in the intensity of victims' reactions to burglary in the first 24 hours following its discovery. Out of a possible 70, scores ranged from a low of 12 to a high of 61. The mean score was 35.25, and the standard deviation, 11.56.

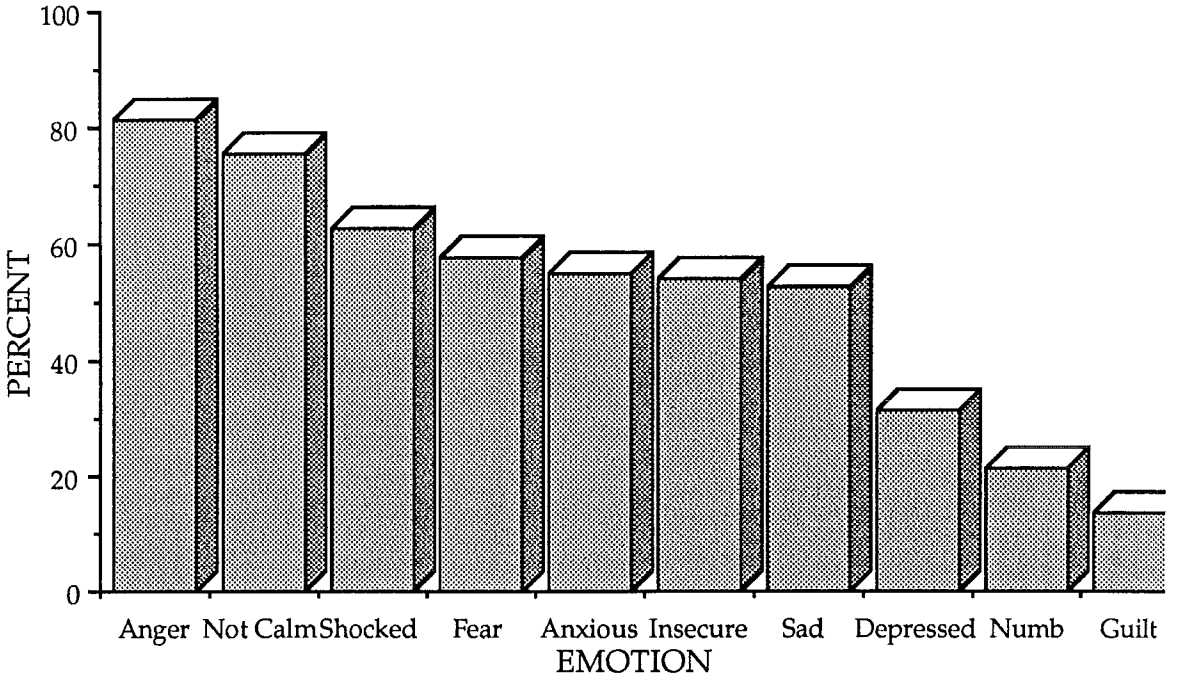

Figure 1. **Percent of Sample Rating Each Emotion with a 4 or Higher on the Immediate Emotion Scale.**

Descriptive data pertaining to the 10 emotions assessed in the scale are presented in Appendix E2 (Table 11) and Figure 1. From these results, it was clear that victims reacted with a variety of emotions in the first 24 hours following burglary. Anger emerged as the most strongly-felt emotion, with 81.38% (83) rating this with a 4 or higher on the 7-point likert scale, and 31.37% (32) giving it the maximum rating, 10. The second-most strongly experienced emotion, (not) calm, was rated by 75.49% (77) with a 4 or more on the 7-point scale, and the highest rating, 7, by 22.55% (23). This emotion was followed in strength by shock. Sixty-four respondents, constituting 62.76% of the sample, rated it with a 4 or higher on the scale. Fear received the fourth-highest ratings of the emotions measures, with 57.85% (59) rating their experience of this emotion as 4 or more, and 20.59% (21) with the maximum score. The fifth and sixth- most strongly experienced emotions, according to the rating scale, were anxiety (54.90%,56) and insecurity (53.93%,55). As Figure 1 shows, the least experienced emotions were guilt (75.49% of respondents reported not experiencing this at all in the first 24 hours following

discovery), numbness (61.18% reported no such feelings) and depression (50% of respondents did not recall experiencing this initially).

Results from the Immediate Emotion Scale exhibited face validity when compared with unstructured interview data. All emotions spontaneously reported by respondents as immediately experienced were included in the unstructured interview except for disbelief. This emotion, related to shock, was reported without prompting by approximately 44% of victims (45).

3.2.2 Longterm Emotion.

Scores on the Longterm Emotion Scale were lower than the Immediate Emotion scores for all but 2.94% of respondents (3), indicating less intense emotions concerning the burglary for most victims. Scores ranged from the minimum score of 10 to a score of 54 (range=44), with the mean score being 22.5 and the S.D., 10.45. As with immediate emotional reactions to the burglary, victims differed widely in the number and type of emotions experienced, as well as in the intensity of emotional reaction. Descriptive data for the Longterm Emotion Scale are presented in Appendix E3 (Table 12) and in Figure 2.

Of the 10 emotions measured, anger emerged as the most strongly experienced (relating to the burglary) by the time of assessment. When scores were tallied, 49.02% of respondents (50) were found to score 4 or higher on this emotion, while 12.75% (13) still gave anger the maximum rating, 7. The second-highest ratings were given for fear, with 32.35% (33) rating this emotion with a 4 or higher, while the third- strongest longterm emotion was sadness, with 31.37% (32) rating their experience as 4 or higher on the scale. Thirty-one respondents, constituting 30.3% of the sample, rated (not) calm with a 4 or more. As with the Immediate Emotion Scale, numbness, guilt and depression emerged as the least-experienced longterm emotions, respectively rated as not experienced at all (ie. 1) by 89.22% (91), 85.29% (87) and 73.53% of respondents (74).

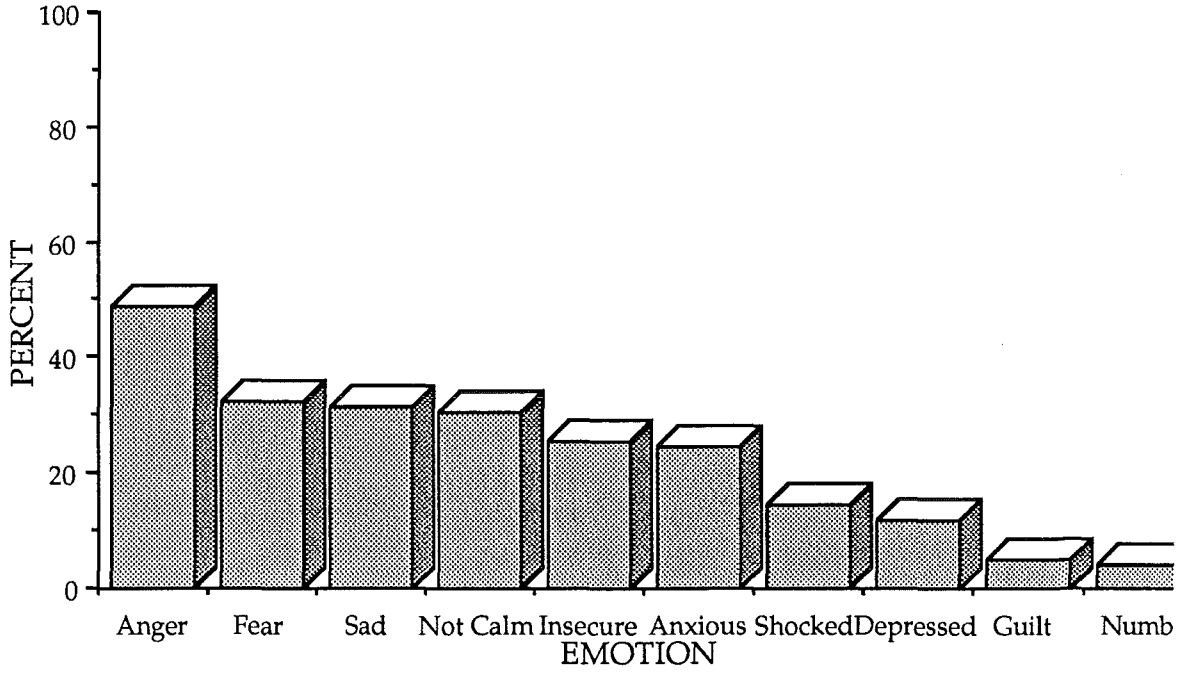

Figure 2. **Percentage of Sample Rating Each Emotion with 4 or Higher on the Longterm Emotion Scale.**

3.2.3 Intrusiveness.

As with results of the Emotion Rating Scales, descriptive data from the Intrusiveness Scale demonstrated wide variation in reactions between victims. Total scores ranged from the minimum, 5, indicating no intrusiveness and attained by 9.8% of respondents (10), to a score of 33 (0.98%,1). The mean score was 13.72 and the S.D., 7.01. The ranges, means and standard deviations for scores on each Intrusiveness item are presented in Appendix E4 (Table 13). As these results and those of the item-total correlations (Appendix F, Table 28) indicate, scores on the five items in this scale were similar, with only 0.5 between the highest (item 3) and lowest (item 1) mean scores. Thus, use of total scores only in the analyses of Section 3.3 was justified.

In the unstructured interview, 13.73% (14) spontaneously reported the occurrence of intrusive thoughts about the burglary, providing support for the empirical findings presented. These thoughts tended to occur when victims arrived home to

an empty house, were alone at night, or when they heard of someone else being burgled.

eg.*"...At our old house we felt, after the* (previous)*burglary, we'd drive up the drive everyday thinking is the door going to be open, and I thought when we moved, that feeling would go, and... when I drove up the drive I'd think yeah, everything's going to be alright. And now* (since the latest burglary) *I think is the door going to be smashed, and is my stuff going to be there, and I don't think that feeling ever goes..."* (Resp.59, 30s)

3.2.4 Loss of Trust.

Scores on the Loss of Trust Scale ranged even more widely than for intrusiveness, from the minimum total score of 5 (2.94%,3) to the maximum, 35 (again, 2.94%). The mean score on the Loss of Trust Scale, at 17.15, was higher than that of the Intrusiveness Scale, as was the standard deviation, 7.25. Descriptive statistics for each item in the Loss of Trust Scale are presented in Appendix E4 (Table 13). These results show wider variation between scores on each item than for the Intrusiveness Scale, with a difference of 2.147 between the highest (item 1) and the lowest (item 4) means. However this difference is not great, and given that item-total correlations (Appendix F, Table 28) were adequate, it was justifiable to analyse loss of trust in terms of total scale scores.

Five victims (4.9%) expressed increased suspicion, a phenomenon related to loss of trust, without prompting in the unstructured interview, supporting the empirical findings on Loss of Trust.

Eg.*"I wouldn't go out in the day and I was the street detective of every car that went past... I was always at the window..."* (Resp.31, 40s)

"A couple of times when I've pulled up at the lights I've seen scruffy looking guys and wondered if it was them..." (Resp.65, 40s)

3.2.5 Violation.

As Appendix E4 (Table 13) shows, mean scores for each of the five Violation Scale items ranged wider than those of the other cognition scales, with a difference of 3.08 between the highest (item 4) and the lowest means (item 2). However, while results may have been skewed slightly by item 4, item-total correlations (Appendix F) were adequate for this scale, justifying use of the total scale scores in the analysis of results. As with the Loss of Trust Scale, overall scores on the

Violation Scale ranged from the minimum, 5 (0.98%,1) to the maximum score of 35, attained by 5.88% of respondents (6). The mean and standard deviation for the Violation Scale were similar to those of the Loss of Trust Scale, at 17.09 and 7.50 respectively. Thus, violation and loss of trust were reported as more experienced by the time of assessment than intrusiveness.

Perceptions of violation following burglary were reported without prompting by 30.40% of respondents (31). The following examples illustrate this perception:

"I felt really violated...just that someone could come in here and do that..." (Resp.53, early 20s)

"I felt absolutely shattered and violated, and I still feel that when I come in the door..." (Resp.6,late 50s.)

"The worst part is knowing that someone has been through my drawers aye...it hurts...its like you've been violated something chronic aye" (Resp. 39, 30s)

"It gives you a nasty turn. I think its the fact that someone's actually been in your home and gone through everything...I think that upsets me more than what they've taken" (Resp.26, 40s)

"I felt really dirty..." (Resp.9, 60s)

Perceptions of violation were reflected in behaviour, reported without prompting by 9.8% of respondents (10). One respondent had moved house since the burglary because of such perceptions. Another had repainted her flat and shampooed the carpets in an unsuccessful effort to "get rid of the feeling of violation", while others had indulged in less excessive cleaning rituals.

3.2.6 Security Behaviour.

It has already been mentioned that data obtained using the Security Behaviour Checklist will not be analysed in Section 3.3, concerned with the influence of various individual and event characteristics on reaction severity of victims. However, descriptive data obtained via this measure and the Security Consciousness Rating Scales will be presented. The measures did provide useful information on victim reactions, despite yielding results inconsistent with the other impact measures, due to extraneous influences on such behaviour.

When respondents were asked to retrospectively rate their level of security consciousness prior to and immediately after the burglary, 73.50% (74) indicated an increase in security consciousness *immediately following* the burglary. The same percentage indicated that their *current* level of security consciousness was greater than it had been prior to the burglary. Although 9.80% of these respondents (10) felt that their security consciousness level had decreased since*immediately after* the burglary, 2.94% (3) felt that they had become even more security conscious since then.

Since the burglary, the majority of victims had taken practical steps to improve their home security, both to prevent further victimisation and to ease the negative feelings which arose from the event. Results from the Security Behaviour Checklist showed that subsequent to the burglary, 80.4% (82) of victim households had taken at least one measure to prevent burglary and/or improve their insurance cover, 53.3% (54) had taken two or more such measures, 42.2% (43) three or more, 5.88% (6) had taken at least four such measures, and 0.98% (1) had made at least five changes to improve their home security. While such home security measures were constructive, some victims went beyond this in the first few weeks following the burglary, indulging in more extreme avoidance behaviours such as staying away from their homes (5.88%,6), sleeping with their children (0.98%,1), not going on holiday or out at night (8.82%,9), and nailing up windows (2.94%,3). Almost all respondents reported that such behaviours had ceased by the time of assessment.

3.3 THE DIFFERENTIAL IMPACT OF BURGLARY ON VICTIMS: RESULTS FROM THE PRESENT STUDY.

It is now clear from the descriptive results presented in Section 3.2 that reactions of victims varied widely in intensity. To determine whether this variation was at all predictable in terms of *systematic* between-group differences or consistent

relationships with certain variables, statistical testing was required. The results of Section 3.3 relate directly to the hypotheses of the present study.

3.3.1 Bivariate Analyses.

3.3.1.1 Age.

The mean scores for each age group on the six dependent measures are presented in Table 2. Analyses of variance were conducted to determine whether significant age differences existed in the results of the Immediate and Longterm Emotion Scales, and the Intrusiveness, Loss of Trust and Violation Scales. Results of the ANOVAs, presented in summary form in Appendix E5 (Table 14), showed no significant differences between groups. To enable closer analysis of results, a series of unpaired t-tests were conducted, comparing all age groups on dependent measures.

Table 2. **Mean Scores on Dependent Measures for each Age Group.**

Age	*N*	*Imm. Em.*	*L.T.Em.*	*Intrusive.*	*Trust*	*Violation*	*Sec. Beh.*
15-24	18	37.500	22.222	13.889	16.167	15.944	1.333
25-39	41	32.049*	20.805	12.659	17.073	15.902	1.390
40-59	35	38.057*	23.714	14.486	17.229	18.457	1.400
60+	8	34.250	26.500	15.375	19.375	19.750	2.125

*Difference between two *s is significant at .05 level.*

As shown in Table 2, only one significant difference emerged, between the 25-39 and 40-59 age groups (the two *-marked means) for the Immediate Emotion measure, $t(74) = 2.207$, $p<.031$. However for the Loss of Trust and Violation Scales and the Security Behaviour Checklist trends of increased mean scores with age were apparent. A crude pattern of increased impact with age was also identified for the Longterm Emotion and Intrusiveness measures, but again, no significant differences were identified. Apart from Immediate Emotion, the 60+ age group possessed the highest mean score on all measures. Lowest mean scores were obtained by the 25-39 age group on the Immediate Emotion, Longterm Emotion,

Intrusiveness and Violation Scales, while for Loss of Trust and Security Behaviour, the 15-24 age group scored lowest on average.

3.3.1.2 Marital Status.

Analyses of Variance were conducted to determine whether the mean scores of the five marital status categories differed significantly on any of the dependent measures. Results of these analyses, presented in Appendix E6 (Table 15), revealed no such significant differences. To explore the results further, unpaired t-tests were undertaken, comparing all group means with each other for the five dependent measures. Only one such comparison, divorced versus separated victims, showed a significant between-group difference, $t(25)=2.05$, $p<.05$ for the Violation Scale.

Table 3. **Mean Scores on Dependent Measures for each Marital Status Category.**

Status	*N*	*Imm. Em.*	*L.T.Em.*	*Intrusive*	*Trust*	*Violation*	*Sec. Beh.*
Never M.	15	35.000	19.467	12.067	16.133	15.400	1.533
Mar/defac	51	34.412	23.039	14.431	17.275	17.137	1.647
Divorced	16	39.000	26.062	15.875	17.750	20.000*	0.875
Separated	11	33.273	19.818	11.636	15.909	14.273*	1.364
Widowed	9	36.111	21.444	11.111	18.556	17.889	1.222

*Difference between two *s is significant at .05 level.*

However examination of the mean scores, presented in Table 3, showed some consistency in results. Divorced victims scored highest on both emotion measures and the Intrusiveness and Violation Scales, while separated victims showed the least impact in terms of immediate emotion, loss of trust and violation, and were the second-lowest scorers for the Long-term Emotion and Intrusiveness Scales. Never-married victims were low-mid scorers on all measures, while married/defacto victims showed the highest Security Behaviour mean score, and mid-range scores on other measures. Results for widowed respondents were less patterned. Although the group showed least impact on the Intrusiveness measure, their mean score was the highest for the Loss of Trust Scale.

3.3.1.3 Live Alone.

The mean scores of the live alone and live with others groups (as defined in Section 2.5.7) for the dependent measures are presented in Table 4.

Table 4. **Mean Scores on Dependent Measures for Individuals Living Alone or With Other Adults.**

Living Situation	*N*	*Imm. Em.*	*L.T. Em.*	*Intrusive*	*Trust*	*Violation*	*Sec. Beh.*
Live alone	25	34.080	22.680	13.480	17.840	17.440	1.280
Live-Others	77	35.623	22.442	13.792	16.922	16.974	1.494

In order to determine whether a difference existed between the reactions of victims who lived alone and those who lived with other adults, unpaired t-tests were conducted for the first five dependent measures. As results presented in Appendix E7 (Table 16) show, no significant differences were identified. Examination of the group means revealed no systematic trends in results.

3.3.1.4 Social Support.

Correlational and simple regression analyses were conducted for social support, as for all other continuous independent variables in the present study. Correlation coefficients indicate *strength* of relationships between variables, while regression analysis, a related test, indicates how *predictive* the independent variable is of scores on dependent measures. Results of these analyses are presented in Appendix E8 (Table 17). As these results indicate, none on the correlations were significant. However the strength of relationships between level of social support and scores on Violation ($R=.182, p<.067$) and Loss of Trust ($R=.179, p<.071$) approached significance. The level of social support reported by victims was only slightly predictive of scores on the emotion and cognition measures, with social support accounting for only 3.3 percent of variance in Violation scores, the scale for which it was most predictive.

3.3.1.5 Life Stress.

The mean scores for the two life stress groups are presented in Table 5.

Table 5. **Mean Scores on Dependent Measures for the two Life Stress Categories.**

Other Life Stressors?	*N*	*Imm. Em.*	*L.T. Em.*	*Intrusion*	*Trust*	*Violation*	*Sec. Beh.*
Yes	32	35.250	22.219	12.688	18.312	16.250	1.250
No	70	35.243	22.629	14.186	16.614	17.471	1.529

Unpaired t-tests were conducted to determine whether differences existed between the reactions of respondents who had and had not been faced with other life stressors in the six- month period prior to assessment. The results of these tests, presented in Appendix E9 (Table 18), showed no significant differences between groups. In addition, no consistent trends emerged in the results.

3.3.1.6 Insurance Status.

The mean scores for the three insurance categories on the emotional, behavioural and cognitive impact measures are presented in Table 6. In order to determine whether differences in reaction severity between groups were significant, ANOVAs were conducted. These results, summarised in Appendix E10 (Table 19), show that the only significant group difference occurred for the Violation Scale, $F(2,99) = 3.832$, $p < .025$. However results from the Intrusiveness and Loss of Trust Scales neared significance, at $F(2,99) = 2.818$, $p < .065$ and $F(2,99) = 2.511$, $p < .086$ respectively.

Table 6. **Mean Scores on Dependent Measures for each Insurance Category.**

Insu. Cat.	*N*	*Imm. Em.*	*L.T. Em.*	*Intrusion*	*Trust*	*Violation*	*Sec. Beh.*
Full Cover	69	34.290	21.493	12.623	16.058	15.710*	1.551
Part. Cov.	12	37.333	25.911	16.058	19.833	19.583	1.250
No Insur.	21	37.190	23.857	15.524	19.190	20.190*	1.190

*Difference between two *s is significant at the .05 level.*

To examine the results in more depth, unpaired t-tests were conducted to compare each group with the others on the emotion and cognition dependent measures. These comparisons revealed significant differences between the fully insured and

uninsured groups on the Violation Scale, t(88) =-2.46, p<.016 (marked with *s). No other significant between-group differences were identified. However comparisons of the full and partially-insured group scores for the Intrusiveness Scale and fully insured and uninsured group scores for the Loss of Trust measure neared significance, at t(79) =-1.944, p<.056 and t(88) =-1.851, p,.068 respectively.

Consistent trends emerged in the results, with the fully insured group scoring lowest on all measures except Security Behaviour. The partially insured group attained the highest mean scores on the Intrusiveness, Loss of Trust and Emotion measures, and uninsured, highest on the Loss of Trust and Violation measures. The difference between the partially insured group's mean scores and those of the uninsured victims was less than between these groups and the fully insured group.

3.3.1.7 Previous Burglary.

The mean scores for the previously- and not previously-burgled groups are presented in Table 7. Unpaired t-tests were conducted to determine whether the two groups differed significantly in mean scores on the emotion and cognition dependent measures. As Appendix E11 (Table 20) indicates, no significant results were obtained. However, a fairly consistent trend was apparent when means were examined. For all but the Intrusiveness measure, the previously-burgled group scored higher on average when compared with the not-previously-burgled group.

Table 7. **Mean Scores on Dependent Measures for groups who Have and Have Not Been Burgled Previously.**

Previously Burgled?	*N*	*Imm. Em.*	*L.T. Em.*	*Intrusive*	*Trust*	*Violation*	*Sec. Beh.*
Yes	57	36.228	23.561	13.439	17.807	17.842	1.561
No	45	34.000	21.156	14.067	16.311	16.133	1.289

3.3.1.8 Monetary Value of Loss.

In order to test hypothesis 8, it was necessary to determine the strength of the relationship between monetary value of loss and the psychological impact of burglary. Therefore, correlation coefficients were calculated along with simple regression analyses for monetary value of loss and the five dependent measures. The results of these analyses are presented in Appendix E12 (Table 21). As these results show, correlations between the independent variable and three of the dependent measures were significant; Immediate Emotion ($R=.253$, $p<.01$), Intrusiveness ($R=.237$, $p<.017$) and Violation ($R=.226$, $p<.022$). Meanwhile, the correlation between victims' monetary value of loss and their Loss of Trust Scale scores approached significance, at $R=.178$, $p<.074$. Thus, the relationship between monetary value of loss and psychological impact of burglary was relatively strong for four of the five dimensions assessed. As indicated by the R^2 values, the predictive strength of this variable was low, but reached significance for three of the five aspects of reaction assessed, accounting for 6.4 percent of variation in Immediate Emotion Scale scores, 5.6 percent of the Intrusiveness Scale's score variance, and 5.1 percent of the variation in Violation scores.

3.3.1.9 Sentimental Value of Loss.

Results of correlational and simple regression analyses conducted for this variable are presented in Appendix E13 (Table 22). These results show relationships of significant strength between sentimental value of loss and scores on Immediate Emotion ($R=.306$, $p<.002$), Longterm Emotion ($R=.222$, $p<.025$), Intrusiveness ($R=.311$, $p<.002$) and Violation ($R=.279$, $p<.005$), with greater sentimental losses associated with greater impact. The strength of the relationship between sentimental value of losses and scores on the Loss of Trust Scale did not reach significance.

When proportions of variance accounted for (R^2) were calculated, Intrusiveness emerged as the aspect of psychological impact most-predicted by sentimental

value of loss, with this variable accounting for 9.7 percent of the variation in Intrusiveness scores. Sentimental value of losses accounted for 9.3 percent of the variation in Immediate Emotion scores, followed by 7.8 percent for Violation and 4.9 percent of variation in scores on the Long-term Emotion Scale.

3.3.1.10 Degree of Disarrangement to Residence.

As with the other continuous independent variables investigated, correlation and regression analyses were executed for degree of disarrangement to residence, in order to determine whether higher disarrangement is associated with greater psychological impact. Results of these analyses are presented in Appendix E14 (Table 23). Correlation coefficients obtained were among the highest identified in the study, with degree of disarrangement significantly related to scores on all dependent measures. In order of strength, correlations were: Violation, $R=.393$, $p<.0001$, Immediate Emotion, $R=.320$, $p<.001$, Intrusiveness, $R=.313$, $p<.001$, Longterm Emotion, $R=.281$, $p<.004$, and Loss of Trust, $R=.222$, $p<.025$.

When the proportions of variance accounted for by degree of disarrangement to residence (R_2) was calculated, this variation was found to predict a high 15.5 percent of variation in scores on the Violation Scale, and 10.2 percent of Immediate Emotion Scores. For the Intrusiveness Scale, 9.8 percent of the variation in scores were predicted by the degree of disarrangement to respondents' homes, and 7.9 percent of variation in Longterm Emotion scores.

3.3.1.11 Degree of Territorial Intrusion.

To determine the relationship of this variable to the level of residential burglary's psychological impact on victims, correlation and regression analyses were calculated. Results of these analyses, presented in Appendix E15 (Table 24), show that scores on only one of the dependent measures, Immediate Emotion, were significantly related to degree of territorial intrusion ($R=.194$, $p<.05$). However, correlations for the other dependent measure were in the direction of that for

Immediate Emotion, with some increase in reaction intensity with greater intrusion. Territorial intrusion accounted for only 3.8 percent of variation in Immediate Emotion scores. Thus, the variable is of little use in predicting burglary victims' reaction severity.

3.3.1.12 Police Handling.

The mean scores for the phone contact-only and police-visited groups are presented in Table 8.

Table 8. **Mean Scores on Dependent Measures for the two Police Handling Categories.**

Response	*N*	*Imm. Em.*	*L.T. Em.*	*Intrusive*	*Trust*	*Violation*	*Sec. Beh.*
Phoneonly	24	32.042	20.417	11.250	15.375	15.458	1.542
Police visit	78	36.231	23.141	14.474	17.692	17.590	1.410

In order to determine whether these groups differed significantly in reaction severity, a series of unpaired t-tests were conducted. Results of these t-tests, presented in Appendix E16 (Table 25), revealed only one significant between-group difference, for the Intrusiveness scale, $t(100) = -1.221$, $p < .0048$. Results followed a consistent trend, with the police-visited group scoring higher on average on all dependent measures except the Security Behaviour Checklist.

3.3.2 Multivariate Analyses.

It was initially intended that multiple regression analyses would be conducted to investigate the relative influence of different victim characteristics on reaction. However because bivariate analyses yielded non-significant results for almost all analyses involving these variables, such statistics were regarded as of little value. Therefore, multiple regression analyses were limited to independent variables for which bivariate analyses had revealed significant results on most dependent measures (ie. disarrangement of residence, and sentimental and monetary value of losses). These results are presented later in this section.

3.3.2.1 Insurance Status and Monetary Value of Loss.

In order to test Hypothesis 8, it was necessary to determine whether the monetary value of losses was more predictive of reaction for uninsured victims than for victims with full insurance. To accomplish this, data for the fully insured and uninsured groups were in turn isolated and correlation and simple regression analyses conducted for each of the dependent variables, with x as value of loss. Results of the correlation analyses for fully insured victims, presented in Appendix E17 (Table 26), showed significant results for all dependent measures. Further, all results were stronger than for the same analyses on the victim sample as a whole (see Appendix E10). For the relationship between Value of Loss and Immediate Emotion, the result for fully insured respondents was R=.346, p<.004, while for Longterm Emotion, R=.234, p<.05. Correlations between value of loss and intrusiveness, loss of trust and violation for fully insured victims yielded R=.334, p<.005, R=.272, p<.024, and R=.347, p<.003 respectively. For uninsured respondents, no significant results were found (see Appendix E18), indicating that the monetary value of losses was not predictive of severity of reaction for this group.

From regression analyses, Violation was identified as the measure for which insured victims' scores were most-predicted by value of loss, with this event characteristic accounting for 12.1 percent of variation in Violation scores. This was closely followed in predictability by Immediate Emotion (R^2=.119) and Intrusiveness (R^2=.111)

3.3.2.2 Multiple Regression Analysis Results for Disarrangement, Sentimental and Monetary Value of Losses and Dependent Variables.

The results of the multiple regression analyses are presented in Table 9.

Table 9. **Multiple Regression Analyses for Disarrangement, Sentimental and Monetary Value and Dependent Measures.**

Dep. Meas.	*DF*	*Multiple R*	*R2*	*F*	*Prob.*
Immed. Em.	3,98	.4	.2	6.1	.001
L.T. Em.	3,98	.3	.1	3.6	.017
Intrusiveness	3,98	.4	.2	6.6	.001
Loss of Trust	3,98	.3	.1	2.3	N.S.
Violation	3,98	.4	.2	6.9	.001

The results of this analysis show that the variables disarrangement, and sentimental and monetary value of loss together account for 20 percent of the variance across the sample for Immediate Emotion, Intrusiveness and Violation scores, and 10 percent of this variance for Long-term Emotion and Loss of Trust. For the latter dependent measure, prediction was non-significant when these three variables were taken together. This was unsurprising, given that bivariate analyses revealed non-significant relationships with this construct for sentimental and monetary value. For both Immediate Emotion and Intrusiveness, predictive significance was greater when the three independent variables were used together than when employed individually in bivariate analyses.

Chapter Four

DISCUSSION

While consideration was given to the nature of victim reactions, the main purpose of the present study was to examine the relationship which a variety of victim and event characteristics had with the psychological impact of residential burglary. In meeting this aim, the research extended the current knowledge-base concerning the differential impact of victimisation. It assessed this in a different cultural setting to previous research, and employed multiple measures of impact and an adequately sized sample of police derivation. In addition, it expanded the range of independent variables investigated for this phenomenon, and for the first time, considered practical applications of the differential impact findings.

Discussion of the results of the present study will begin with a brief consideration of the nature of burglary's psychological impact. This will be followed by discussion of the results as they pertain to the hypotheses. Theoretical implications will then be outlined for the results, followed by limitations of the present study and directions for future research. Finally, the implications of the research findings for police and victim support agencies will be considered.

4.1 RESIDENTIAL BURGLARY: THE NATURE OF ITS PSYCHOLOGICAL IMPACT.

It is clear from the results of the present study that victims' reactions to burglary do indeed vary widely in intensity. Although some respondents reported very minor reaction intensity, others were severely affected by the experience. While variation in *intensity* of reaction was clearly illustrated by results, variation in *type* of reaction was less obvious. Significant correlations were identified between all scales except the Security behaviour Checklist, indicating that a person's reaction intensity on one impact measure was likely to resemble their reaction intensity on other measures. Some of these correlations were high, and

particularly those between violation and the emotion measures. However given that the emotion scale scores reflected rather broad aspects of impact and that violation was expected to contribute to other aspects of psychological impact (under violation of self theory), this finding does not disconfirm previous findings that reactions vary in type and intensity.

In contrast to the cross-scale similarities in respondents' scores, analysis of individuals' Immediate and Long-term Emotion Scale responses revealed that individuals' *emotional* reactions did in fact vary in range as well as intensity. When individuals' highest-rated emotions were compared for the Immediate Emotion Scale, these differed widely. Over half respondents (51.96%) had most-highly rated emotions in a combination different to that of any other respondent, and no two respondents rated the 10 emotions in exactly the same manner as someone else. This variation in range was less wide for the Long-term Emotion Scale, due to the prevalence of anger in responses (34% gave this emotion alone the highest rating) and the low reporting of the emotions shock, numbness and guilt. However there were still very few victims who gave identical ratings over the whole scale.

Although not the main focus of the present study, this finding has useful implications for those dealing with victims of crime, emphasising the necessity to deal with victims as individuals with differing needs. A person who is extremely fearful following victimisation may require just as much support as someone in shock. However this support must be tailored to individual needs, the former requiring crisis intervention tactics and the latter, practical assistance to remove fear by increasing perceptions of security.

4.2 THE DIFFERENTIAL IMPACT OF RESIDENTIAL BURGLARY: RESULTS PERTAINING TO THE HYPOTHESES OF THE PRESENT STUDY.

Apart from Maguire (1980), most researchers concerned with identifying factors related to the differential impact of residential burglary have focussed on victim *or* event characteristics. In the present study, both were considered, with the expectation that characteristics of both types would be related to severity of reaction. However as the results presented in Chapter 3 show, event characterisics emerged as far more useful in predicting victim responses than the victim characteristics investigated. While all event characteristics were found to significantly impact on at least some of the dependent measures, very few relationships or between-group differences were identified as significant for the victim characteristics. Results for each variable will be discussed in turn, as they relate to the relevant hypotheses.

4.2.1 Victim Age.

Hypothesis 1 postulated that victims aged 60 and over would be no more affected by residential burglary than victims of other age groups. This hypothesis was partly supported by the finding that the 60+ age group scored higher than the other age groups on all dependent measures except Immediate Emotion, although their mean scores were not *significantly* different from those of other age groups.

Unfortunately, the sample of victims aged 60+ in the present study was small (N=8), reflecting the fact that the elderly face a lower incidence of victimisation than other age groups (Manderson,1990). Further research is needed using a large 60+ subsample to determine whether the lack of a significant difference was due merely to the small sample size and the susceptibility to skewing which accompanies this, or whether the elderly really are more affected than victims of other age groups. Given that results showed clear trends of increased impact with age on the Loss of Trust, Violation and Security Behaviour measures and crudely increasing mean scores on the Longterm Emotion and Intrusiveness measures, it is

likely that severity of impact is indeed greater on average for older victims, in accordance with commonly-held stereotypes of the elderly.

The trend of increased impact with age can be explained by the empirical finding that as people get older, they increasingly value possessions for their symbolic meanings (Kamptner,1991), rendering such possessions irreplaceable upon loss. (Refer to Section 4.3 for further discussion.) The likelihood that the *elderly* are more affected by burglary can be further explained. Firstly, the elderly are typically less mobile than other age groups, tending to spend more time at home, at the scene of the victimisation. This was true of the present 60+ subsample, 50 % (4) of whom were in their late 70s or 80s. Also, elderly people are often on a modest, fixed income, making the financial impact of burglary potentially high.

4.2.2 Victim Marital Status.

Concerning the marital status of victims, Hypothesis 2 stated that widowed, divorced and separated victims would be no more affected by residential burglary than married, defacto or never-married victims. This hypothesis was developed to refute Maguire's (1980) contrary finding, for which he had offered no explanation, and which was not supported by research on rape (Sales et al.,1984). The results of the present study supported Hypothesis 2, thus disconfirming Maguire's finding. No significant differences were identified between the married/defacto and never-married and the separated, divorced and widowed groups. Nor did any trends emerge to support such a between-group difference.

While the impact of burglary did not vary between marital status groups in the way Maguire (1980) had identified, an unexpected systematic between-group difference was identified for this variable, between the separated and divorced groups. The divorced group emerged as the highest scorer on four of the five dependent measures (the Emotion measures, Intrusiveness and Violation measures). In contrast, the separated group scored lowest on the Immediate

Emotion, Loss of Trust and Violation scales, and near-lowest for Longterm Emotion and Intrusiveness. In fact, the only significant between-group difference for this variable emerged between these two categories, for the Violation scale.

This unexpected between-group difference is difficult to explain, and may in fact be an artifact rather than a generalisable between-group difference. However, at least for the present sample, some explanation exists. In terms of the demographics of these two groups in the present sample, divorced respondents tended to be older and have less financial resources than separated respondents. The latter group most closely resembled the never-married group, a resemblance reflected in the two group's mean scores on the dependent measures. These demographic differences may have been responsible for the differential impact identified between these groups. The hardships associated with divorce for many women (eg. worsened financial circumstance, lowered standard of housing, childcare complications) may intensify burglary's impact, especially when losses are high. In contrast, burglary may be relatively less stressful for separated victims, who are yet to face hardships such as the division of jointly-owned property, and loss of the family home.

4.2.3 Live Alone.

Hypothesis 3 proposed that the psychological impact of residential burglary would be less severe for victims who lived with one or more adults than for victims who lived alone or with persons under the age of 16 only. This hypothesis was not supported by results of the present study.

In contrast to popular opinion, revealed in numerous discussions between the author and others regarding the current research, whether or not one lives alone appears to constitute a crude indicator of the *quality* and *amount* of social support one receives in a crisis. All respondents in the present study who lived alone possessed telephones, and consequently were able to (and most did) contact a

friend or family member for support and advice following the burglary. At least 24 percent of the respondents who lived alone also either had someone stay with them in their home or stayed with family elsewhere for anything up to a few weeks following the burglary. Just as living alone does not automatically deny one support, living with other adults does not ensure its provision. Married/defacto individuals or flatters may be very isolated, especially if those they live with take little interest in their well-being and if they have few outside contacts.

It soon became clear in the present research that individuals differ widely in disposition, including need for support. Many individuals live alone by *choice*, and not because circumstance has forced them into that lifestyle. Several respondents made comments in the interview indicating that they liked being independent, and that even a burglary was something that they would prefer to deal with alone. Since live alone/with others poorly indicates availability, quality and need for support, this variable is of little relevance in future attempts to predict differential impact. Research attention therefore needs to turn to the search for a more valid indicator of these factors. This will be further discussed in Section 4.2.4.

4.2.4 Social Support.

The fourth hypothesis investigated in the present study postulated that the level of psychological impact which residential burglary had on victims would be influenced by the level of post-event support which they had received. The results obtained did not significantly support this hypothesis. However the *patterns* of results for each measure were in the direction predicted by the hypothesis, with reaction severity tending to decrease with higher levels of support.

Social support is not a static phenomenon but rather, a process. Although measures such as the ISSB can indicate the approximate level of support received by an individual, they ignore its complexity. The impact of a crisis such as burglary is unlikely to be affected to any great degree by the *level* of support per

se. In addition, it is influenced by the *type* of support, its *quality*, and the victim's *need* for support and preferred coping strategies. As mentioned in Section 4.2.3, individuals differ in reactions to crises, with some seeking support while others thrive on coping alone. Thus, what constitutes appropriate support for one person may be inappropriate for another.

Future research into the differential impact of victimisation needs to move beyond support frequency rating scales such as the ISSB or social network instruments (eg. Sales et al.,1984), both of which treat social support as static and unchanging. Measures must be developed which assess the way individuals have reacted to past stressors; their sources of support, the type and extent of support favoured by the individual and the time span of support provision. Only by gaining a full picture of the support process can the true influence of this factor on victimisation's impact be accurately assessed.

4.2.5 Life Stress.

Hypothesis 5 stated that the psychological impact of burglary would be greater for victims who had experienced stressful life events additional to the burglary in the last six months prior to assessment than for victims for whom the burglary was the only significant life stressor in recent months. This hypothesis was not supported by the results of the present study.

When the responses of individual victims were considered, some victims with other significant sources of life stress had referred to the burglary as "the final straw", indicating that the burglary was more upsetting because of their life circumstance. Others however found that the burglary went almost unnoticed, because their attention was concentrated on far more serious life stressors. Thus, the influence of other life stressors varied widely between individuals, and undoubtedly over time. It is likely to be too complex to be detected by the simple present/absent indicator employed in the present study. Future analyses of this

variable need to consider exact type of stressor(s), and victim rating of level of stress arising from the event as compared with that of the burglary. Through such analyses, specific patterns may emerge, whereby certain types of stressors may consistently be associated with intensified impact of victimisation while others may not be. Thus, additional predictors of victim reaction severity may be identified.

4.2.6 Insurance Status.

The sixth hypothesis tested in the present study stated that the degree of psychological impact which residential burglary had on victims would be related to their level of insurance, with impact greater for uninsured victims than for those with partial or full insurance on their possessions. This hypothesis was partly supported in the present study, with a significant between-group difference on the Violation Scale and near-significant differences for the Intrusion and Loss of Trust Scales. Fully insured victims sustained lower impact than the other groups on all measures, perhaps substantiating the notion that insurance offers "peace of mind" in times of crises.

Victims with only partial insurance cover reacted more severely on average than uninsured victims on all measures except Violation, although not significantly. This finding can be explained by the fact that many of those with partial insurance cover did not realise the inadequacy of their insurance policy until they made the claim. Consequently they suffered further unexpected stress after the event. In contrast, while the burglary caused financial difficulty for many of the uninsured victims, they knew their circumstance at the time of the burglary.

4.2.7 Previous Burglary.

Hypothesis 7 proposed that victims who had previously been burgled would react more severely to the latest residential burglary than would victims to whom the experience was new. This hypothesis did not receive significant statistical support in the present study. However previously burgled respondents did score higher

on average than those not previously burgled on all measures except the Intrusiveness Scale. Hence, the pattern of results was in the direction predicted by the hypothesis.

The lack of a statistically significant finding in support of Hypothesis 7 is not surprising when the unstructured interview responses of previously burgled victims are considered. As with the live alone and social support variables, this variable appears to have differential influence on victims. Six respondents (10.5 percent of the previously burgled subsample) made statements suggesting that previous burglary had not made the latest event any easier to cope with.

eg. *"we were burgled here two years ago, so* (what upset me) *was that it was the same house, and they'd started in my room again, so the same feelings were back again..."* (Resp.86, 30s)

However two other respondents (3.5 percent of the previously burgled subsample) indicated that the event was less stressful because they had experienced it before.

eg. *"I knew what to do because we'd been through it all before"* (Resp. 91, 40s)

It is possible that this differential influence is due to changing influence of this variable over time. Longitudinal research is necessary to determine whether this is in fact the case.

4.2.8 Monetary Value of Loss.

Hypothesis 8 stated that the monetary value of items stolen would be predictive of the impact which residential burglary has for uninsured victims but not for victims with full insurance cover or for the victim sample in general. In fact, the findings of the present study suggested the opposite. Correlation and regression analyses conducted to determine the impact of monetary value of loss for the sample in general showed significant positive relationships between value of loss and scores on the Immediate Emotion, Intrusiveness and Violation measures, and a near-significant relationship with Loss of Trust. Thus, for the sample in general, higher value of losses was consistently associated with greater psychological impact, except for Longterm Emotion. This finding contradicted that of Maguire

(1980) and Brown & Harris (1989). In general, victims were more upset with greater financial loss.

Interesting findings emerged when the specific influence of value of loss on psychological impact was considered for fully-insured respondents compared with the uninsured group. Rather than following the pattern proposed in Hypothesis 8, monetary value of losses was found to have *no impact* on reaction severity of the*uninsured* sample. In contrast, this variable was *even more significantly predictive* of reaction severity for *fully insured* victims than for the victim sample in general.

These findings go against the commonsense assumption that large financial loss will have greater impact when there is no means of recovering such losses (ie. through an insurance payout). However they can be explained. Firstly, fully insured victims suffered higher monetary losses on average (mean loss= $2013.76) than either the partially insured (mean loss= $1357.50) or uninsured groups (mean loss= $917.14). Secondly, it is likely that the motives for insuring one's belongings may have some relation to reaction severity. People fail to take out insurance not just because they cannot afford to do so. It is likely that some individuals choose not to insure their belongings because they believe that burglary is not something that would upset them. In contrast, people who know that they would be upset by burglary may be more motivated to take out insurance, in the hope that this will ease the impact should burglary occur. Although unsubstantiated, it is also likely that insured individuals value material possessions more highly than uninsured individuals. Thus, when these are unlawfully taken, insured individuals are more upset by the experience, even though they may receive replacements at a later date.

4.2.9 Sentimental Value of Losses.

The ninth hypothesis postulated that the psychological impact of residential burglary would increase with higher sentimental value of losses. This hypothesis was supported, with sentimental value significantly related to victim scores for Immediate and Long-term Emotion, Intrusiveness and Violation. Individuals were more likely to suffer serious psychological reactions to burglary when items of high sentimental value were taken, while burglaries in which only items of low sentimental value were stolen tended to have less negative psychological impact on victims.

The statistical finding that greater sentimental loss is related to heightened perceptions of violation, immediate and longterm emotional reactions and cognitive intrusiveness is backed up by respondents' own comments in the unstructured interview.

eg.1 *"...jewellery that I've had for years* (was taken)*...a lot of its sentimental. It's not worth much, but its bits and pieces that I've sort of bought with a friend or got given..."* (Resp.47, 30s)

eg.2 *"I'm getting another* (insurance replacement) *string of pearls. They're at the jeweller, and I haven't gone to get them, because I DON'T REALLY WANT THEM. They're not my mother-in-law's, and that's the tragedy. The things were personal and they meant something because they were personal".* (Resp.92, 50s)

eg.3 *"I felt emotional about it because the things that were taken had sentimental value...some pieces of jewellery had belonged to a brother who died..."* (Resp.51, 30s)

eg.4 *"It would've been much worse if they'd taken personal possessions, but everything could be replaced so it* wasn't *that bad..."* (Resp.78, 30s)

Implications of this finding are outlined in Section 4.3.

4.2.10 Disarrangement to Property.

Hypothesis 10 stated that the degree of psychological impact which residential burglary had on victims would be positively related to the degree of disarrangement to the home. Of the variables investigated in the present study, this yielded the most significant results, strongly supporting the hypothesis for every aspect of psychological impact investigated. Not surprisingly, the highest correlation was identified between this variable and scores on the Violation Scale.

As with loss of sentimentally valued items, comments from respondents in the unstructured interview further supported the empirical findings.

eg.1 *"The whole place was ransacked...every drawer and cupboard was pulled out and clothes were scattered everywhere. I went cold, quite cold..."* (Resp.40, 40s)

eg.2 *"I felt quite sick because ...everything was just pulled to pieces and it looked like someone had been through the house like a tornado..."* (Resp. 36, 40s)

In at least four cases where respondents indicated low impact, they stated that this would not have been the case had the burglary involved disarrangement.

eg.1 *"I kept saying to myself be thankful because they haven't...you hear of people getting their house really messed up. And I was thankful that they didn't knock things about"* Resp. 91, 50s)

eg.2 *"There was no mess, and this was a great relief to us. It would have been much worse even if a window had been broken but there was no mess at all"* (Resp. 79, 30s)

Again, the theoretical implications of this finding are outlined in Section 4.3.

4.2.11 Territorial Intrusion.

Hypothesis 11 proposed that the psychological impact of residential burglary would increase with greater territorial intrusion (ie. number and importance of rooms stolen from). Results of the present study showed this variable to be less predictive of reaction severity than sentimental value of losses or degree of disarrangement to residence, both of which relate to territorial intrusion. However significant results were found for Immediate Emotion, with greater intrusion associated with higher scores on this measure. Thus, Hypothesis 11 was partially supported.

It is possible that a closer relationship would have emerged between this variable and scores on the psychological impact measures, had the variable been defined differently. It was considered inappropriate to define territorial intrusion to include rooms entered as well as stolen from or disarranged, since unless a room was disturbed or stolen from, entry was unlikely to be obvious to the respondent. Future researchers need to consider new ways of assessing degree of territorial intrusion in relation to the differential impact of burglary, given that this variable is closely associated with violation of self theory. Perhaps assessment should consider the proportion of the home in which victims felt the "presence" of the

burglar- a perception reported without prompting by at least 9.8% of respondents (10) in the present study.

4.2.12 Police Handling.

The last hypothesis investigated in the present study postulated that longterm emotional reactions, cognitive intrusiveness and perceptions of violation and loss of trust would be less severe for victims who received direct police contact following reporting than for victims who received only indirect contact with police. This hypothesis was not supported by the results of the present study. Rather, the pattern was the reverse of that predicted on all measures, with police-visited respondents reporting greater impact than those dealt with by phone only. For the Intrusiveness measure, this between-group difference was significant.

Although unexpected, the current finding can be logically explained. It is of course possible that a police visit actually intensifies the impact of burglary. However a more likely explanation exists. At least in Christchurch, not all burglaries result in a police callout. However, the data suggests that a callout (usually by a fingerprinting officer) is *more likely* if respondents are obviously more distressed. Unfortunately, this does not appear to lessen the impact of burglary. Thus, whether a burglary is dealt with by phone only or by a fingerprinting visit seems to have little influence on the psychological impact of the event on the victim. Means of improving this situation in the future are outlined in Section 4.6.2.

4.3 THEORETICAL IMPLICATIONS OF THE RESULTS.

From the results, it seems that all existing theories concerning the psychological impact of victimisation have made useful contributions to our understanding of how victims react, and the causes of their reactions. Apart from an overemphasis of the intrusive thinking and self-recrimination phases, Crisis theory fits well with the current findings concerning the nature of victim reaction. Similarly, results

supporting Taylor et al.'s (1983) selective evaluation explanation of crisis resolution and Maguire's (1980) public image of burglary theory were identified. 6.72% of respondents (7) made spontaneous remarks following the theme "it could have been worse", while at least 5.88% of respondents (6) had devictimised themselves by expressing sympathy for the offenders, viewing their burglary as a societal problem rather than a personal one. Evidence also emerged to support the shattering of assumptions explanation of *why* victimisation triggers adverse psychological reactions. At least 5.88% (6) indicated without prompting that they had perceived themselves as invulnerable prior to the burglary. The following statement is typical:

> *"I had honestly come to believe that because I have an alarm, no one could burgle me, so that was a bit of a shock"* (Resp.57,30s)

While these theories fit with the current findings concerning how and why residential burglary can be a traumatic experience, apart from an untested suggestion that individuals may differ in strength of assumptions, they do little to explain why individuals differ in *intensity* of reaction, the main focus of this research. As we have seen, those victim characteristics investigated in the present study have at best emerged as only weak predictors of reaction. In contrast, of the event characteristics explored, degree of disarrangement to residence emerged as significantly predictive of all dimensions of psychological impact assessed, sentimental value of losses was predictive of four of the five dimensions of psychological impact, and monetary value of losses, three dimensions of psychological reaction. Significant results were also obtained for territorial intrusion for one of the five dependent measures.

The comparatively strong predictive power of event characteristics, and in particular, degree of disarrangement and sentimental value of loss is easily explained within the violation of self theory (Bard & Sangrey,1979) and theoretical work concerning the meaning of home and possession (Bennett,1991; Brown &

Harris,1989; Csikszentimihalyi & Rochberg-Halton,1981; Dittmar,1989,1991; Korosec-Serfaty & Bolitt,1986), outlined in Section 1.3.3.

Firstly, a person's home is more than just their source of shelter. It is their safe territory and private retreat, over which they have control concerning who may and may not enter. Further, it is an extension of self, contributing to one's identity. This is immediately evident when one considers the efforts people go to to distinguish *their* house from any other. When a person is burgled, the potential for violation to be perceived arises, given that territory has been invaded without the person's permission. The greater the invasion into their home, the greater the potential for violation to be perceived and the more severe the perceived violation will be. Under this theory, degree of disarrangement is expected to relate to perceptions of violation and the resulting emotional and cognitive trauma, since this act blatantly indicates disregard for the victim's rights as controller of their territory.

Just as the link between degree of disarrangement and psychological impact on victims can be explained under the existing violation of self theory, so too can the relationship between sentimental value of losses and burglary's psychological impact. A person can value a possession purely for its instrumental worth - for what it allows the person to do. For example, a camera may be valued by its owner because it takes a good photo. However possessions can also take on varying degrees of sentimental value, when they symbolise to the owner aspects of their identity, such as social position, personal achievements, relationships, and pleasures. For example, another individual may treasure their camera because it was a gift to them on a special occasion.

If a person is the victim of a burglary in which items stolen are of little value to them, they are unlikely to suffer much upset about the loss. If items valued only

for their instrumental worth are taken, a greater potential for upset exists, but since these items do not have symbolic meanings attached and replacements are likely to be available, the victim is unlikely to experience feelings of violation. However when items are stolen which have sentimental value, perceptions that one has been violated are likely, given that these objects are an extension of self. Losing these items can be interpreted by the victim as losing a piece of one's identity. Obviously the greater the sentimental value of the object, the greater the perception of violation when this is stolen.

While characteristics of burglaries were identified which were significantly related to the severity of burglary's psychological impact on victims, at most, independent variables accounted for only 15.5 percent of variance in scores on any one of the dependent measures when taken in isolation. Thus, by using knowledge derived from the present study, our ability to predict victim reaction would still be subject to many errors. Even when two individuals suffer the same level of disarrangement and monetary value of losses, and are both of the same insurance status, they are unlikely to react in the same way to the experience.

There are several reasons for our limited predictive power. Firstly, it is likely that many of the victim characteristics explored do have some influence on reaction intensity. However their influence was either too subtle to be identified by the current measures, or, as with social support, was not static but rather, it changed over time, making influence difficult to ascertain with static measures. The relationship of such variables to reaction severity is best determined via a longitudinal research design.

Individual characteristics exist which were unable to be included as variables in the present study but which are highly likely to influence severity of victim reaction. For example, an individual would be expected to react more severely to

burglary if they possess a history of psychopathology, and in particular, affective or anxiety disorders (Burgess & Holmstrom,1974). A Christchurch study conducted in 1986 by Oakley-Browne, Joyce, Wells, Bushnell & Hornblow (1989) put the six-month prevalence rate of major depressive disorders at 7.1 percent for females and 5.3 percent overall, anxiety and somatoform disorders at 11.6 percent for females and 8.4 percent overall, and generalised anxiety at 11.6 percent for females and 9.6 percent overall. Relevant baserate information was obviously unavailable for the present sample, given that this would require a prospective design to achieve a satisfactory level of data accuracy. However it is likely that at least some respondents and a sizeable proportion of the victim population in general are, due to psychological predisposition, prone to serious anxiety or depressive reactions to burglary. Knowledge of such a predisposition, although difficult to gain, would undoubtedly improve predictive accuracy concerning reactions to criminal victimisation.

It is expected that prediction accuracy could also be increased markedly if information was available concerning the manner in which victims have reacted to past stressors. Since this too would require a prospective research design involving a large research sample, this could not be empirically tested in the present study. However, comments of at least 13.75 percent of respondents (N=14) supported the researcher's suspicion that people possess a predisposition to react in consistent ways to stressful situations.

eg. *"I'm a pretty steady sort of person...I take things in my stride"* (Resp.65, 40s, minor reaction)
"...but I have a lot of trouble with my nerves anyway, I'm very nervy anyway" (Resp.67, 60s, severe reaction)

This predisposition could easily override the influence of variables investigated in the present study, explaining the limited predictive power of results. Regardless of the situation's seriousness, some individuals will always react in an extreme manner, becoming very upset and requiring considerable support, while others

will cope with all manner of events with little fuss and without the need for support from others.

4.3.1 Towards a Predictive Model of the Severity of Burglary's Impact on Victims.

Clearly Violation of Self (and related work on the meaning of possessions) is the best theoretical explanation for why burglary impacts on some individuals more than others. As well as explaining the predictive power of event characteristics and age (see Section 4.2.1), it also offers an explanation for the gender differences in reaction to burglary, identified in past research. Since men and women value possessions for different reasons (Dittmar,1989,1991; Kamptner,1991), they react differently to the loss of these. The most-valued possessions of males tend to be those of instrumental worth, items for which replacements are likely to be just as valued as the original. In contrast, females tend to value belongings for their symbolic meanings, making the loss of highly valued items potentially devastating, given that these are irreplaceable.

Although the Violation of Self theory is useful, when taken alone it only accounts for a fraction of all interpersonal variation in reactions. Therefore, the following model is proposed (see Figure 3), integrating this theory with other factors contributing to burglary's impact. Factors identified through present and past research are incorporated in the model, along with tentative factors still requiring empirical testing and unknown influences on victim reaction. Apart from the unknown influences, these are ordered according to *expected strength of influence* on severity of reaction. They include the event characteristics contributing to perceptions of violation, and victims' predisposition to cope well/poorly with the stressor, a tentative factor incorporated on the basis of strong anecdotal evidence from the present study. The third factor included in the model, history of anxiety or depressive psychopathology, was also tentatively included on the basis of previous research on other forms of victimisation (Atkeson et al.,1982; Burgess & Holmstrom,1974; Sales et al.,1984).

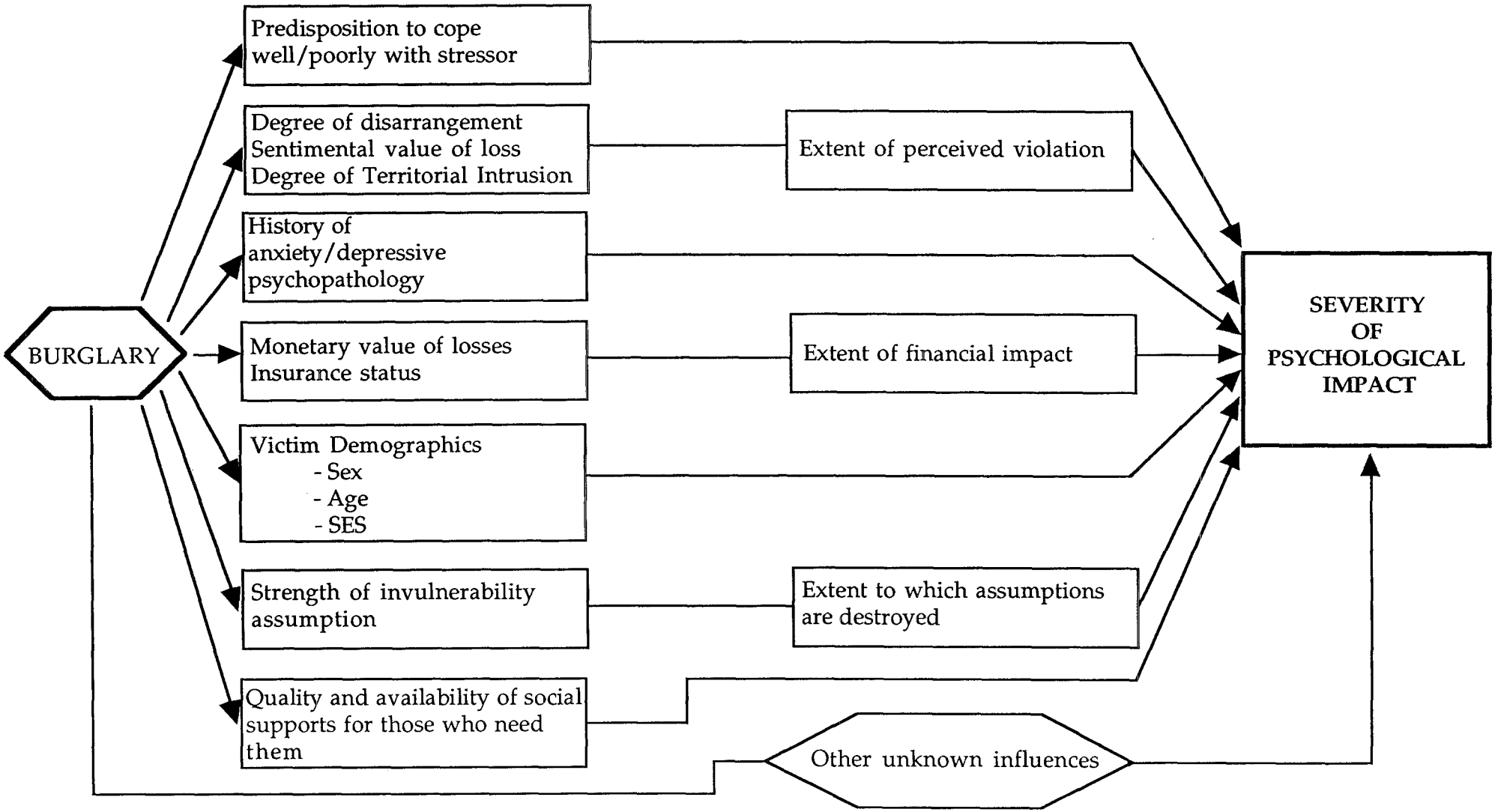

FIGURE 3 A PREDICTIVE MODEL OF SEVERITY OF REACTION TO BURGLARY

The extent of burglary's financial impact is the fourth factor in the proposed model, included in light of current research findings. This is followed by the individual characteristics age, sex and SES. The sixth-strongest factor in the model, the extent to which assumptions are destroyed, was incorporated on the basis of research by McCann et al. (1988) and Perloff (1983). This factor is dependent on the degree to which the victim perceived themselves as invulnerable (ie. prior to the burglary, believed that such an event would not happen to them). Finally, the model includes as a predictor of reaction the quality and availability of social supports for those who need them. Here it is acknowledged that not all victims require support, and when they do, this varies in type.

4.4 LIMITATIONS OF THE CURRENT RESEARCH.

The present sample was limited to adult female victims of burglary in an effort to simplify an already-complex multivariate design. However this procedure limits the application of the research findings. Men and children are also victims of burglary, yet results must not be generalised to the entire victim population without extreme caution being exercised. Ideally, in order to determine whether the present findings on the differential impact of burglary apply to males and children, comparable research must be conducted for these populations.

The second limitation of the current research concerns the population from which respondents were drawn - victims who reported crime to the police. Such a sample excludes non-reporters, yet these groups differ in several ways:

1. Reporting crime is a prerequisite to laying an insurance claim, suggesting that a police-derived sample will have a higher proportion of insured victims and a higher mean loss value than the burglary victim population in general.
2. Victims are more likely to report if they are upset, since doing so fosters the perception that "something is being done".

3. Reporters are likely to possess a more favourable view of the police than will non-reporters.

This obviously biases the sample, potentially distorting results. In obtaining data from the police, only victims with inactive files were contacted. Again, this may have biased results since very few of the burglaries sampled had, to the victims knowledge, been solved in terms of recovery of goods or arrest.

Of the original sample of 144 victims, 23 had moved residence since the burglary and could not be contacted. This is unfortunate, since it is unknown whether some of the women moved *as a consequence* of the burglary's psychological impact. Given that one respondent interviewed had done this, it is a possibility.

Difficulties can arise when attempts are made to measure any psychological phenomenon, and the psychological impact of burglary is no exception. Although efforts were made to minimise bias in the present study by not informing respondents of the differential impact focus until the conclusion of the interview, the possibility of experimenter demand effects cannot be dismissed. There is a chance that some respondents exaggerated their reported reactions in the belief that this is what the researcher "wanted to hear". Similarly, presentation bias may also have arisen, particularly for the social support measure. People may not want to admit that they have very limited social support, so they exaggerate their scoring.

Use of the likert-type scales seemed successful in the present study, with little evidence of the response-set problem (ie. giving the same response for each item), sometimes biasing such research (Kerlinger,1986). However while most measures employed possessed adequate validity and reliability, the Security Behaviour Checklist was subject to bias not evident in piloting. I would recommend that future researchers do not use the purchase of security devices as an indicator of

behavioural reaction to burglary. Rather, such an indicator should be limited to cost-free changes such as locking doors, shutting windows, leaving lights on when out, having a friend mind the house when away and the like.

Because it was necessary to conduct the current research in the field without experimental controls, there are no certainties in results. While statistical testing indicates which relationships or baserate differences are significant, it does not rule out the possibility that a result may be due to extraneous variables. For example, no baserate data is available to show respondent scores on the instruments *prior* to victimisation. Such information would be extremely useful in interpreting post-victimisation data, allowing for more robust conclusions to be drawn concerning differential impact predictors.

Respondents own descriptions of their initial reactions to the burglary and the Immediate Emotion Scale employed in the present study relied on victims' memories. It is well-known that human memory is fallible; it does not constitute a "copy" of what happened or how we felt in a situation, but rather, is constructed at the time of retrieval (Myers,1987). While measures were taken to minimise memory bias, it is likely that the responses of some victims may not have accurately reflected their true reactions.

A final limitation of the present study concerns the fact that, due to time and financial limitations, prospective or longitudinal research designs were not practicable. Instead, the present research, apart from one retrospective measure, assessed victim impact at one point in time. Since impact is not a static phenomenon but rather a process through which individuals pass at different speeds (Cook et al.,1987; Wirtz & Harrell, 1987), this design is less than ideal. Similarly, the research is limited in ability to assess the influence of factors such as

social support, given that the level, nature and source of support desired and received by victims varies over time.

4.5 DIRECTIONS FOR FUTURE RESEARCH.

Although quite a few studies have been undertaken to investigate aspects of residential burglary's psychological impact on victims, much of these are poor in quality. In reviewing this research, one is immediately struck by the urgent need for standardised, well-developed and objective scales specifically oriented toward the measurement of reaction to property victimisation. Only when such measures are developed, using large and diverse samples to develop norms, can research into the differential impact of burglary and similar crimes truly take-off. Such a task was well beyond the scope of the present study, but is an attainable goal of future researchers.

For most victims of burglary, the severity of their reactions to the event gradually diminishes over time. However this is not always the case. For example, one respondent in the present study reported that because she was busy with work around the time of the burglary, the event did not "hit her" until she relaxed, approximately a week later. Wherever possible then, future researchers into the impact of criminal victimisation need to employ longitudinal research designs, if they are to adequately understand the nature and pattern of victim reactions. Such a research design is even more desirable in light of current conclusions regarding the influence of factors such as social support on victim reaction. While a variable may not be related to impact severity one month following the burglary, six months later it may. Only through longitudinal research can the influence of a variable over time be fully ascertained.

The necessity for replicative research concerning many of the variables investigated in the present study and using large, representative samples has

already been stated. However in investigating whether systematic differences existed in victim reactions for the various individual and event characteristics, other areas requiring future research also became clear. In the search for between-group marital status differences in reaction, the separated and divorced groups were found to differ in a consistent fashion. Since these groups are normally combined as one category in research, investigation is needed to determine whether the impact of other stressors also differs for these groups.

In investigating the relationship between monetary value of losses and reaction for fully insured versus uninsured victims, value of loss emerged as very predictive of reaction for the former group and unrelated to reaction severity of the latter group. Investigation is needed to determine whether these groups differ in the level to which they value material possessions, and how fully insured individuals *think* they would react to burglary as compared with uninsured individuals. Given the current research findings, it is expected that the decision to insure one's belongings is influenced not only by financial circumstance but also by one's expectations regarding how they might react to the loss of their possessions. Uninsured individuals may be such because they expect that high monetary losses would not upset them greatly.

It has already been mentioned that a person's disposition seems to have a large part to play in determining the severity of their reaction to victimisation. All other factors being equal, some individuals just appear to be more prone to severe reaction to stressors, while others seem resistant to negative reactions. Research should be conducted to determine the usefulness of psychopathological history in predicting reaction. Similar research is needed concerning individuals' pre-event*expectations* concerning how they might react to victim-isation based on their knowledge of themselves, how they have reacted to past stressors and which

coping behaviours they favour. Naturally, birth cohort research offers the best scope for such investigations.

The final need for further reseach which became apparent in the present study is that of investigation into the impact which burglary has on children. To date, no such research has been published, even though children are often part of burgled households. Seven respondents in the present study spontaneously reported that their children had been more severely affected than they, suffering from sleep disturbances, nightmares and general anxiety for some time following the event. Two respondents even reported that their children had taken improvised weapons to bed with them since the burglary. Research is needed to compare reaction patterns of men, women and children, and to identify ways of reducing the anxiety reactions of children.

4.6 IMPLICATIONS FOR POLICE AND VICTIM SUPPORT.

4.6.1 Who Should Receive Help?

It is not always apparent to police receiving a report whether the victim is upset. This is due to factors such as variations in the way people express emotions, in the patterns of their reactions to crises, and the way others (including police officers) *perceive* a person's reaction. Ideally then, all victims of residential burglary should routinely receive a police visit soon after filing a report regarding the crime. Unfortunately, given the current workload of the police, this is not possible. At present, victims of burglary are very unlikely to receive a visit from a police control car following the event, although the majority do seem to receive a visit from police fingerprinters, usually by the following day. (As we have seen in Section 4.1.12, such fingerprinting visits do not appear to reduce impact.) Luckily, alternative means of meeting victim needs are available. In Christchurch and at least 60 other centres throughout New Zealand, victim support programmes are in operation.

Despite the availability of victim support, research in the UK, on whose programmes most of the New Zealand ones are based, suggests that services of this type tend to receive few self-referrals from victims and are often under-utilised by frontline police officers. Referrals are most often made for victims stereotyped as vulnerable - the aged and frail (Mawby & Gill,1987). At least in Christchurch, efforts are being made by victim support to widen the service's coverage by attempting to contact *all* victims of reported crime by telephone, to see how they are coping and whether they would appreciate a v.s. visit. However based on the current finding that only 36.3 percent of respondents had received such contact by the time of the interview and that this had mostly occurred at least two weeks after the event, it is likely that many victims in need of support are still "slipping through the cracks".

Both the police and victim support programmes could clearly improve their service to victims of residential burglary. According to Crisis theory, victim support will be most effective when provided soon after the event. In the case of police, officers in the frontline need to continually be made aware of victim needs, the services available to them and the need to notify victims of these services. This can only be achieved effectively by means of on-going, carefully developed training programmes which incorporate evaluation of training effectiveness and above all else, aim for a high *transfer* of knowledge into action.

Making police acutely aware of residential burglary's potential impact on victims and the services available will ensure that more victims who need support will receive this than without such training. However on its own, this measure will not go far enough. Police simply do not have the time to visit all victims of property crime or to contact victim support about every case. This is where findings of the current research and of previous investigations into differential impact may be of considerable value to police as well as victim support. Under the present situation

of limited police resources, these can be applied to ensure that services to victims are provided in a systematic rather than random fashion.

From the past and present research into the differential impact of residential burglary, we know that a severe psychological reaction is most likely to occur when territorial invasion is high - when the house has been extensively disarranged, losses are of high sentimental value, and a large proportion of the home has been entered by the burglar(s). It is also more likely when the monetary value of losses is high. Although wide individual differences exist, the psychological impact of burglary *tends* to be greater when victims are female, older, uninsured, divorced, have little support from others, or have previously been burgled.

Information on most or all of these factors could easily be obtained by duty officers receiving crime reports. Potential exists then for this information to form the basis of a formalised decision making heuristic regarding what support should be provided to victims. Such a decision strategy is presented in Figure 4. If employed by police or v.s. it would undoubtedly decrease the likelihood of victims in need of support failing to receive this. To ensure this, the strategy errs on the side of *over-provision* of support. It is acknowledged in the formulation of the decision strategy that even without any of these research-derived factors being present, a person may still be seriously affected by victimisation. Therefore, the first two steps of the heuristic (Does victim appear distressed?, Has victim expressed need for support?) override these factors. Naturally these steps are reliant on officer perception and sensitivity, but even if the victims' needs are misinterpreted at this stage, further levels of the decision strategy are more likely to identify victims in need of assistance than if no such decision strategy is employed.

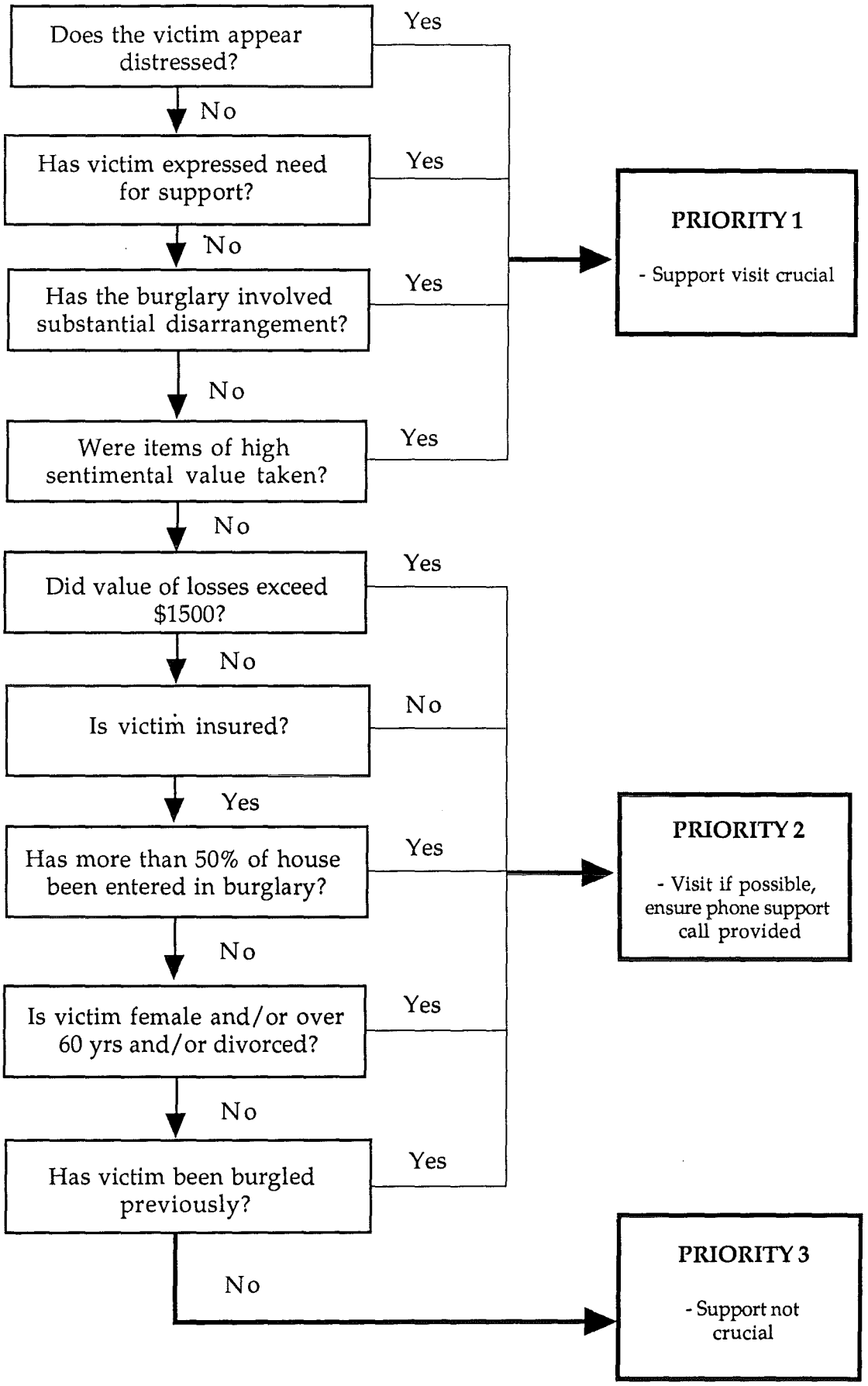

FIGURE 4:
DECISION STRATEGY CONCERNING SUPPORT TO BURGLARY VICTIMS

4.6.2 What Form Should Support Take?

The procedure outlined in Figure 4 will ensure that a greater proportion of victims in need of support are identified by police and v.s. than under present circumstances. However the strategy only prioritises victims according to the *degree* of support which will surfice for them. Research has been conducted to investigate*which types* of support are most effective in reducing the psychological impact of residential burglary (Rosenbaum,1987; Van den Bogaard,1990; Van den Bogaard & Wiegman,1991). Ideally, these findings should be applied by police and victim support teams *in combination* with the recommendations of the current study.

As well as applying the decision making strategy of Figure 4 for every report of burglary (a procedure that would take at most a few minutes), police officers and victim support volunteers should be trained to apply the following principles, derived from the quasi-experimental research of Rosenbaum (1987) and Van den Bogaard (1990):

-Treat victims with respect and sensitivity

-Provide information about the investigation wherever practicable

-Provide practical information regarding constructive preventative measures against future burglary

-Wherever possible, aim to restore victims' sense of personal control

In light of current research findings and conclusions, police and victim support volunteers should also aim to:

-Reduce victims' perceptions of violation, by talking about such feelings and their normality, and suggesting ways of restoring their sense of territory and self (eg. by tidying things back to the way they were prior to the burglary, focussing on sentimentally valued items still in their possession and realising that the things that the possessions symbolised still exist in their memories)

-Minimise the financial impact of burglary where this is going to seriously impact on everyday functioning (eg for beneficiaries and victims of lower SES), by arranging social welfare assistance

-Dispel victim fears that they are likely to be revictimised, by focussing on the efficacy of simple preventative measures and the likelihood that the burglar was probably not a "professional"

Training those who deal with victims in these principles and strategies requires considerable attention to the transfer of this knowledge to the field. Obviously the efficacy of these measures cannot be ascertained without formal evaluation. However it is expected that by applying the decision strategy in combination with principles of effective victim support, services to victims will be improved.

4.7 CONCLUSION.

The present study has concerned the relationship of a variety of factors with the severity of residential burglary's impact on victims. While burglary differs from many other crimes in the sense that it involves territorial violation, many of the findings are not limited this crime in their application. Similarly, while the present sample was comprised of female victims, at least some of the results may, with extreme caution, be generalisable to the victim population in general. Apart from the event characteristics specific to burglary, the predictive model of severity of victim reaction (Figure 3) could well apply to other forms of victimisation. Following on from this, the decision strategy presented in Figure 4 could also, with adaptation based on relevant research, be applied to victims of other crimes.

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APPENDIX A

POLICE
Nga Pirihimana O Aotearoa

Ref:

29 April 1992

Dear

According to Police records, your home was burgled in the last few months. I am writing to ask that you consider participating in a project being conducted by Detective Sandy Manderson (Christchurch Police) with information collected by Sarah Wylie (University of Canterbury Psychology Department).

The project aims to investigate the impact which burglary has on its victims. Findings will be of value to Police and social support groups in identifying the needs of victims so that they can provide better assistance in the future.

Please consider this request, and be assured that your identity will only be known by the researcher and the Police. You will be contacted by telephone in the next couple of weeks by Sarah to see whether you wish to participate in the interview. If you choose to do so, an appointment will be made for the interview at a time and place convenient to you.

Thanks for your time.

Yours sincerely

S J Manderson
Detective

NEW ZEALAND POLICE DISTRICT HEADQUARTERS
Cnr Hereford St/Cambridge Tce, Christchurch. PO Box 2109
Phone (03) 793 999, Fax (03) 637 848, After Hours Fax (03) 794 208

APPENDIX B.

University of Canterbury
Department of Psychology
in cooperation with the
Christchurch Police CIB
Researcher: Sarah Wylie

CONSENT FORM

The purpose of this project is to investigate the impact which burglary has on victims.

Your tasks in this project:

If you agree to participate in the interview, you will be asked to talk about your experience of burglary, and to rate your emotional, psychological and behavioural reactions to it.

You will also be asked to give personal details such as your age, whether you are insured, how many people live in your home, and whether you had been burgled before.

Finally, you will be asked a few questions about the burglary itself, such as what sort of items were taken, and how the police dealt with the complaint.

The interview will take about 30 minutes. Participation is voluntary, and if at any time you decide not to continue, that is okay.

Risks associated with participation.

You may become anxious when talking about your reactions to the burglary. Support will be offered to you if this is the case.

While the researcher has obtained your name with police permission, no one else will find out your identity, and you will not be identifiable from the final report.

I agree to participate in the project described above, on the understanding that if at any time I wish to withdraw from the study I may, without prejudice, do so. Your identity will be kept confidential at all times.

Name _____

Signature _____

Date _____

APPENDIX C: INSTRUMENT.

BURGLARY DETAILS

I will now ask you a few questions about the burglary itself. Take your time and try and answer the questions as accurately as you can. If you are unsure about anything, please ask. Now-

1. Was the burglary dealt with by the police by phone only or did the police come to your home?

   1 -by phone only 1 2
   2 -police visited home

2. What was the value of the property that was taken? ----------

3. Now, on this scale of 1 to 7 (cue card 1), how messed up was your home after the burglary?

1	2	3	4	5	6	7
not at all messed up			quite messed up			extremely messed up

4. (cue card 2: definition)
   Now, on this scale of 1 to 7 (cue card 3), how would you rate the sentimental value of the items that were stolen?

1	2	3	4	5	6	7
not at all sentimental			quite sentimental			extremely valued sentimentally

5. Which rooms in your home were stolen from or messed up?
   (summate)

garage	kitchen	living area	sleeping area	other
1	2	3	4	1

EMOTION RATING SCALE : IMMEDIATE IMPACT

When you found out that you had been burgled, to what extent (cue card 7) did you feel _____ in the first 24 hours?

1. Angry	1 not at all	2	3	4 quite a bit	5	6	7 extremely so (the most I ever felt like this)
2. Fearful	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
3. Calm **	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
4. Anxious	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
5. Shocked	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
6. Depressed	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
7. Numb	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
8. Guilty	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
9. Sad	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
10. Insecure	1 not at all	2	3	4 quite a bit	5	6	7 extremely so

____

____

Barrerra Social Support Scale (shortened form): Support following the burglary

Please rate the frequency with which the following events have occurred during the last month, using the following scale of 1 to 5 (cue card 6).

1 = Not at all
2 = Once or twice
3 = About once a week
4 = Several times a week
5 = About every day

1. Someone listened to you talk about your private feelings.

   1 2 3 4 5

2. Someone agreed that what you wanted to do was right.

   1 2 3 4 5

3. Someone expressed interest and concern in your well-being.

   1 2 3 4 5

4. Someone pitched in to help you do something that needed to get done.

   1 2 3 4 5

5. Someone let you know that he/she will always be around if you need assistance.

   1 2 3 4 5

_____

_____

Victim Support

Following the burglary, did you receive Victim Support?	Y / N
(*explain what it is if unaware*)	1 2

BEHAVIOUR

A) Security Consciousness Ratings (cue card 4: definition)

1 On this scale of 1 to 7 (cue card 5), how security conscious were you prior to the burglary?

1	2	3	4	5	6	7
not at all security conscious			quite security conscious			extremely security conscious

2 How security conscious were you immediately after the burglary?

1	2	3	4	5	6	7
not at all security conscious			quite security conscious			extremely security conscious

3 How security conscious do you believe you are now?

1	2	3	4	5	6	7
not at all security conscious			quite security conscious			extremely security conscious

Short term change____
Long term change ____

B) Security Behaviour Checklist

Since the burglary have you: *(code 1 / 2)*

1 Changed any locks in your home or fitted extra ones? Y / N
2 Installed (or updated) an alarm? Y / N
3 Taken out insurance or increased your insurance cover? Y / N
4 Fitted additional lights outside your home? Y / N
5 Taken any other actions to increase your home security? Y / N

(*If so*, what actions have you taken?)

_____
_____
_____
_____
_____

COGNITIONS

Using this rating scale (cue card 8), please rate the extent to which the following statements are true for you:

A) Intrusiveness sub-scale

1. I often talk about the burglary.

1	2	3	4	5	6	7
not at all			quite true			extremely true

2. Things I see or hear remind me of the burglary.

1	2	3	4	5	6	7
not at all			quite true			extremely true

3. I have put the burglary behind me now. **

1	2	3	4	5	6	7
not at all			quite true			extremely true

4. I think about the burglary often.

1	2	3	4	5	6	7
not at all			quite true			extremely true

5. Any reminder brings back emotions related to the burglary.

1	2	3	4	5	6	7
not at all			quite true			extremely true

_____

_____

B) Trust sub-scale

6. My neighbourhood is more dangerous than it used to be.

1	2	3	4	5	6	7
not at all			quite true			extremely true

7. I am now more suspicious of strangers in the neighbourhood.

1	2	3	4	5	6	7
not at all			quite true			extremely true

8. My view of people is the same as before the burglary. **

1	2	3	4	5	6	7
not at all			quite true			extremely true

9. The burglary has made me disillusioned with society.

1	2	3	4	5	6	7
not at all			quite true			extremely true

10. I trust strangers less than I used to.

1	2	3	4	5	6	7
not at all			quite true			extremely true

_____

_____

C) Violation sub-scale

11. I have lost my privacy.

1	2	3	4	5	6	7
not at all			quite true			extremely true

12. My home feels dirty and contaminated.

1	2	3	4	5	6	7
not at all			quite true			extremely true

13. I feel powerless.

1	2	3	4	5	6	7
not at all				quite true		extremely true

14. Burglary is just one of those things and you shouldn't worry about it. **

1	2	3	4	5	6	7
not at all			quite true			extremely true

15. I have been violated.

1	2	3	4	5	6	7
not at all			quite true			extremely true

_____

_____

EMOTION RATING SCALE: LASTING IMPACT

To what extent do you feel _____ now?

1. Insecure	1 not at all	2	3	4 quite a bit	5	6	7 extremely so (the most I ever felt like this)
2. Guilty	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
3. Anxious	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
4. Depressed	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
5. Calm **	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
6. Shocked	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
7. Sad	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
8. Fearful	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
9. Numb	1 not at all	2	3	4 quite a bit	5	6	7 extremely so
10. Angry	1 not at all	2	3	4 quite a bit	5	6	7 extremely so

_____

_____

PERSONAL DETAILS

Age Group:

15-24	25-39	40-59	60+
(20)	(32)	(50)	(60)

Marital Status:

Never married	Married/Defacto	Divorced	Separated	Widowed
1	2	3	4	5

Do any other adults (ie. 16 years and over) live at the address where the burglary took place?

Yes	No
1	2

Have you been burgled before? Yes 1 No 2

At the time of the burglary, how much insurance did you have on your household belongings?

Full Cover on contents	Less than the true value of what I/we own	No insurance on contents
1	2	3

In the last 6 months, have you had any experiences that were more upsetting than the burglary ? If so, what?

APPENDIX D: DEFINITION CUE CARDS.

"SECURITY CONSCIOUS"

This means that you try and prevent your house from being burgled, by doing things like-

-always locking doors and windows at night and when you are out

-fitting safety locks on windows and doors

-installing alarms, security lights etc. around your home

-reporting suspicious things you have seen to the police

-belonging to neighbourhood watch, or keeping an eye on houses near yours.

"SENTIMENTAL VALUE"

This means that something is valuable to you not because it is expensive, but because it reminds you of events, people or things that are important to you.

Appendix E(1): Table 10. **Intercorrelation Matrix of Dependent Variables.**

Measure:	*Imm. Em.*	*L.T.Em.*	*Intrusive.*	*Trust*	*Violation*	*Sec. Beh.*
Imm. Em.	----------	.738 (.001)	.592 (.001)	.506 (.001)	.691 (.001)	.092 (n.s.)
L.T.Em.	.738 (.001)	----------	.696 (.001)	.595 (.001)	.768 (.001)	.177 (n.s.)
Intrusive.	.592 (.001)	.696 (.001)	----------	.591 (.001)	.661 (.001)	.276 (.01)
Trust	.506 (.001)	.595 (.001)	.591 (.001)	----------	.666 (.001)	.187 (n.s.)
Violation	.691 (.001)	.768 (.001)	.661 (.001)	.666 (.001)	----------	.088 (n.s.)
Sec. Beh.	.092 (n.s.)	.177 (n.s.)	.276 (.01)	.187 (n.s.)	.088 (n.s.)	----------

*Figure in bracket denotes level of significance of the correlation coefficient, n.s. indicates insignificant result.

Appendix E(2): Table 11. **Immediate Emotion Scale Descriptive Data: Percentage of respondents who made each Likert rating for the 10 emotions.**

	Rating						
Emotion	*1*	*2*	*3*	*4*	*5*	*6*	*7*
Angry	9.80 (N=10)	3.92 (N=4)	4.90 (N=5)	15.69 (N=16)	17.65 (N=18)	16.67 (N=17)	31.37 (N=32)
Fearful	23.53 (N=24)	4.90 (N=5)	13.73 (N=14)	9.80 (N=10)	14.71 (N=15)	12.75 (N=13)	20.59 (N=21)
Calm	0.98 (N=1)	9.80 (N=10)	13.73 (N=14)	26.47 (N=27)	11.76 (N=12)	14.71 (N=15)	22.55 (N=23)
Anxious	20.59 (N=21)	9.80 (N=10)	14.71 (N=15)	16.67 (N=17)	24.51 (N=25)	4.90 (N=5)	8.82 (N=9)
Shocked	16.67 (N=17)	7.84 (N=8)	12.75 (N=13)	16.67 (N=17)	17.65 (N=18)	13.73 (N=14)	14.71 (N=15)
Depress.	50.00 (N=51)	5.88 (N=6)	12.75 (N=13)	9.80 (N=10)	8.82 (N=9)	5.88 (N=6)	6.86 (N=7)
Numb	61.18 (N=63)	5.88 (N=6)	10.78 (N=11)	9.80 (N=10)	3.92 (N=4)	5.88 (N=6)	1.96 (N=2)
Guilty	75.49 (N=77)	6.86 (N=7)	3.92 (N=4)	6.86 (N=7)	1.96 (N=2)	2.94 (N=3)	1.96 (N=2)
Sad	27.45 (N=28)	5.88 (N=6)	13.73 (N=14)	20.59 (N=21)	17.65 (N=18)	11.76 (N=12)	2.94 (N=3)
Insecure	26.47 (N=27)	8.82 (N=9)	10.78 (N=11)	15.69 (N=16)	9.80 (N=10)	13.73 (N=14)	14.71 (N=15)

*Bracketed figure represents the number of respondents giving each rating .

**For the emotion calm, figures presented are reversed scores (ie. NOT CALM)

Appendix E(3): Table 12. **Longterm Emotion Scale Descriptive Data: Percentage of respondents who made each Likert rating for the 10 emotions.**

	Rating						
Emotion	*1*	*2*	*3*	*4*	*5*	*6*	*7*
Insecure	44.12 (N=45)	18.63 (N=19)	11.76 (N=12)	10.78 (N=11)	7.84 (N=8)	2.94 (N=3)	3.92 (N=4)
Guilty	85.29 (N=87)	5.88 (N=6)	3.92 (N=4)	2.94 (N=3)	0.98 (N=1)	0.98 (N=1)	----------
Anxious	39.22 (N=40)	18.63 (N=19)	17.65 (N=18)	12.75 (N=13)	4.90 (N=5)	4.90 (N=5)	1.96 (N=2)
Depress.	73.53 (N=75)	9.80 (N=10)	4.90 (N=5)	5.88 (N=6)	2.94 (N=3)	1.96 (N=2)	0.98 (N=1)
Calm	33.33 (N=34)	22.55 (N=23)	13.73 (N=14)	15.69 (N=16)	4.90 (N=5)	1.96 (N=2)	7.84 (N=8)
Shocked	62.75 (N=64)	15.69 (N=16)	6.86 (N=7)	8.82 (N=9)	2.94 (N=3)	0.98 (N=1)	1.96 (N=2)
Sad	39.22 (N=40)	20.59 (N=21)	8.82 (N=9)	13.73 (N=14)	13.73 (N=14)	0.98 (N=1)	2.94 (N=3)
Fearful	37.26 (N=38)	16.67 (N=17)	13.73 (N=14)	13.73 (N=14)	4.90 (N=5)	6.86 (N=7)	6.86 (N=7)
Numb	89.22 (N=91)	4.90 (N=5)	1.96 (N=2)	2.94 (N=3)	0.98 (N=1)	----------	----------
Angry	27.45 (N=28)	7.84 (N=8)	15.69 (N=16)	12.75 (N=13)	10.78 (N=11)	12.75 (N=13)	12.75 (N=13)

*Bracketed figure represents the number of respondents giving each rating .

**For the emotion calm, figures presented are reversed scores (ie. NOT CALM)

Appendix E(4): Table 13. **Cognitive Scales: Descriptive Statistics for each Item.**

Scale Items	*Score Range*	*Mean Score*	*Standard Deviation*
Intrusiveness			
Item 1	6	2.520	1.426
Item 2	6	3.020	1.835
Item 3	6	2.941	1.984
Item 4	6	2.608	1.764
Item 5	6	2.578	1.880
Loss of Trust			
Item 1	6	3.441	2.178
Item 2	6	4.490	1.958
Item 3	6	2.833	2.158
Item 4	6	2.343	1.942
Item 5	6	4.039	2.161
Violation			
Item 1	6	3.177	2.293
Item 2	6	2.000	1.935
Item 3	6	2.892	2.171
Item 4	6	5.078	1.892
Item 5	6	4.039	2.147

Appendix E(5): Table 14. **Statistics Summary Table: Age, Dependent Measures.**

Measure	*DF*	*SS*	*MS*	*F Test*	*Probability*
Immed. Emot.	3,98	795.084	265.028	2.044	.113, n.s.
L.T. Emotion	3,98	298.807	99.602	0.909	.440, n.s.
Intrusiveness	3,98	89.140	29.713	0.597	.618, n.s.
Loss of Trust	3,98	57.467	19.156	0.358	.784, n.s.
Violation	3,98	203.466	67.822	1.214	.309, n.s.

For all tables in Appendix E, n.s. denotes not significant at the .05 level, while * denotes significance at the .05 level, ** at the .01 level, *** at .005, and **** at .0001

Appendix E (6): Table 15. **Statistics Summary Table: Marital Status, Dependent Measures.**

Measure	*DF*	*SS*	*MS*	*F Test*	*Probability*
Immed. Emot.	4,97	311.449	77.862	0.573	.683, n.s.
L.T. Emotion	4,97	445.051	111.262	1.019	.402, n.s.
Intrusiveness	4,97	250.127	62.532	1.285	.281, n.s.
Loss of trust	4,97	56.773	14.193	0.262	.901, n.s.
Violation	4,97	271.496	67.874	1.218	.308, n.s.

Appendix E (7): Table 16. **Statistics Summary Table: Live alone, Dependent Measures.**

Measure	*DF*	*t - value*	*Probability*
Immed. Emotion	100	0.578	.565, n.s.
Long-term Emotion	100	-0.099	.922, n.s.
Intrusiveness	100	0.192	.848, n.s.
Loss of trust	100	-0.550	.590, n.s.
Violation	100	-0.269	.789, n.s.

Appendix E (8): Table 17. **Statistics Summary Table: Social Support, Dependent Measures.**

Measure	*R*	*R2*	*F Test*	*Probability*
Immed. Emotion	.087	.008	0.765	.384, n.s.
L.T. Emotion	.145	.021	2.160	.145, n.s.
Intrusiveness	.018	.001	0.031	.861, n.s.
Loss of trust	.179	.032	3.322	.071, n.s.
Violation	.182	.033	3.433	.067, n.s.

Appendix E (9): Table 18. **Statistics Summary Table: Life Stress, Dependent Measures.**

Measure	*DF*	*t-value*	*Probability*
Immed. Emotion	100	0.003	.998, n.s.
Long-term Emotion	100	-0.183	.855, n.s.
Intrusiveness	100	-1.001	.319, n.s.
Loss of Trust	100	1.099	.274, n.s.
Violation	100	-0.762	.448, n.s.

Appendix E (10): Table 19. **Statistics Summary Table: Insurance Status, Dependent Measures.**

Measure	*DF*	*SS*	*MS*	*F Test*	*Probability*
Immed. Emot.	2,99	194.765	97.382	0.725	.487, n.s.
L.T. Emotion	2,99	248.766	124.383	1.142	.324, n.s.
Intrusiveness	2,99	267.647	133.824	2.818	.065, n.s.
Loss of Trust	2,99	256.121	128.061	2.511	.086, n.s.
Violation	2,99	407.848	203.924	3.832	.025*

Appendix E (11): Table 20. **Statistics Summary Table: Previous Burglary, Dependent Measures.**

Measure	*DF*	*t-value*	*Probability*
Immediate Emotion	100	0.966	.336, n.s.
Long-term Emotion	100	1.156	.250, n.s.
Intrusiveness	100	-0.447	.328, n.s.
Loss of Trust	100	1.035	.303, n.s.
Violation	100	1.145	.255, n.s.

Appendix E (12): Table 21 **Statistics Summary Table: Monetary Value of Loss, Dependent Measures.**

Measure	*R*	*R2*	*F Test*	*Probability*
Immed. Emotion	.253	.064	6.854	.01**
L.T. Emotion	.161	.026	2.659	.11, n.s.
Intrusiveness	.237	.056	5.953	.017*
Loss of Trust	.178	.032	3.265	.074, n.s.
Violation	.226	.051	5.397	.022*

Appendix E (13): Table 22. **Summary Statistics Table: Sentimental Value of Loss, Dependent Measures.**

Measures	*R*	*R2*	*F Test*	*Probability*
Immed. Emotion	.306	.093	10.308	.002***
L.T Emotion	.222	.049	5.189	.025*
Intrusiveness	.311	.097	10.709	.002***
Loss of Trust	.152	.023	2.357	.128, n.s.
Violation	.279	.078	8.455	.005***

Appendix E (14): Table 23. **Statistics Summary Table: Disarrangement of Residence, Dependent Measures.**

Measure	*R*	*R2*	*F*	*Probability*
Immed. Emotion	.320	.102	11.398	.001***
L.T. Emotion	.281	.079	10.082	.004***
Intrusiveness	.313	.098	10.831	.001***
Loss of Trust	.222	.049	5.199	.025*
Violation	.393	.155	18.309	.0001****

Appendix E (15): Table 24. **Statistics Summary Table: Territorial Intrusion, Dependent Measures.**

Measure	*R*	*R2*	*F Test*	*Probability*
Immed. Emotion	.194	.038	3.916	.05*
L.T. Emotion	.099	.010	0.982	.324
Intrusiveness	.133	.018	1.813	.181
Loss of Trust	.043	.002	0.183	.67
Violation	.161	.026	2.653	.111

Appendix E (16): Table 25. **Statistics Summary Table: Police Handling, Dependent Measures.**

Measures	*DF*	*t- value*	*Probability*
Immediate Emotion	100	-1.563	.121, n.s.
Long-term Emotion	100	-1.118	.266, n.s.
Intrusiveness	100	-1.998	.048*
Loss of Trust	100	-1.376	.172, n.s.
Violation	100	-1.221	.225, n.s.

Appendix E (17): Table 26. **Statistics Summary Table: Monetary Value of Loss, Dependent Measures (Fully Insured group only).**

Measure	*R*	*R2*	*F test*	*Probability*
Immed. Emotion	.346	.119	9.087	.004
Long-term Emot.	.234	.055	3.879	.05
Intrusiveness	.334	.111	8.389	.005
Loss of Trust	.272	.074	5.364	.024
Violation	.347	.121	6.591	.003

Appendix E (18): Table 27. **Statistics Summary Table: Monetary Value of Loss, Dependent Measures (Uninsured group only).**

Measure	*R*	*R2*	*F test*	*Probability*
Immed. Emotion	.024	.001	.011	.919
Long-term Emot.	.026	.001	.013	.911
Intrusiveness	.004	.000	.000	.988
Loss of Trust	.058	.003	.064	.803
Violation	.126	,016	.305	.587

APPENDIX F: Table 28. **Item - Total Correlations For Cognitive Scales.**

Item	*Covariance*	*Correlation*	R^2
Intrusiveness Scale			
1. I often talk about the burglary.	1.098	.554	.306
2. Things I see or hear remind me of the burglary.	2.088	.819	.671
3. I have put the burglary behind me now.	2.293	.831	.691
4. I think about the burglary often.	1.961	.800	.640
5. Any reminder brings back emotions related to the burglary.	2.149	.822	.676
Trust Scale			
1. My neighbourhood is more dangerous than it used to be.	11.368	.677	.459
2. I am now more suspicious of strangers in the neighbourhood.	9.988	.662	.438
3. My view of people is the same as before the burglary.	10.483	.630	.398
4. The burglary has made me disillusioned with society.	10.862	.726	.527
5. I trust strangers less than I used to.	12.306	.739	.546
Violation Scale			
1. I have lost my privacy.	13.891	.763	.582
2. My home feels dirty and contaminated.	11.723	.763	.582
3. I feel powerless.	13.579	.788	.620
4. Burglary is just one of those things and you shouldn't worry about it.	8.071	.537	.289
5. I have been violated.	11.565	.678	.460